Trade and Industry

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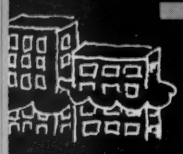

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Trade and Industry

17 November 1978

News from the Departments of Industry·Trade·Prices & Consumer Protection

Britain's wool textile, clothing and carpet industries are faced with a time of change. Our report on page 322 makes the point that the key to the survival of these industries is investment in more advanced technology.

Trade and Industry

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We have moved

From 20 November our address will be

Trade and Industry
Eighth Floor
1 Victoria Street
London SW1H 0ET

Telephone and telex numbers are unchanged

Trade and Industry this week

EUROPE

PM calls for broad balance between interests of community members

Britain cannot agree to become the largest net contributor to the community budget, Prime Minister James Callaghan said on Monday night.

If this situation were to remain uncorrected, it would do long-term damage to the community as well as to Britain.

Speaking at the Lord Mayor's dinner in London, Mr Callaghan stressed that unless there was a broad balance between the interest of the community members, it would not be able to develop. That balance did not exist when Britain joined, partly because of the cost of the common agricultural policy (CAP) and partly because of the way in which the community raised its revenues from its members. Contributions to the community budget were drawn from the import duties and levies collected on agricultural and industrial imports to each country from outside the community. So the greater the dependence of a community country on the outside world, the heavier was its contribution to the community budget.

Before Britain's entry into the community, both the commission and the member states had indicated that there would be a major shift over a period of time in the pattern of community policies which would reduce the burden of Britain's contributions to an acceptable level. It was stated, he went on, that the intention was to develop policies in the industrial and regional sectors so as to diminish the proportion of the budget spent on agriculture.

But this promised shift had not been made, Mr Callaghan said. Too little, relatively, was being spent on regional problems, such as the regeneration and restructuring of the older industrial areas and on training and other programmes.

He pointed out that as a result of the high level of expenditure on agriculture, some of the wealthiest members of the community were also those who got the most benefit from the community budget.

In Britain's case there was an imbalance between contributions and receipts. This was having a growing and adverse effect on the balance of payments.

Mr Callaghan, however, was glad to hear that the commission was likely to make some proposals to correct this. The government would certainly study them carefully.

He stressed that Britain was not seeking to amend the true objectives of the CAP. The simple truth was that the present situation did not tally with CAP's principles and objectives.

He felt that three changes should be made: the community should take a more liberal attitude towards agricultural imports from the rest of the world; it should make better use of export subsidies; and member nations should reconsider their policy of increasing price support every year and put an end to a situation in which they actually increased the price support of a product which was already overproduced.

On the question of a European monetary system (EMS) (see page 337), Mr Callaghan indicated that the government would reach a decision in time for the House of Commons to discuss the issue before he met the other heads of government in Brussels in December.

He stressed that a scheme should provide for an enlarged membership and should not be drawn up in such a way as to prevent or impede the creation of an even wider monetary zone, perhaps embracing the dollar and other currencies.

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HOME

New trade secretary takes office

John Smith, who was appointed Secretary State for Trade on Saturday 11 November took office on Monday. It is his first cabinet post.

He was formerly Minister of State at the Privy Council Office from April 1976 where he had special responsibility for devolution and piloted the Scotland and Wales bills through the house of commons.

Other government posts Mr Smith has held previously were Parliamentary Under-Secretary of State for Energy with special responsibility for oil and gas from October 1974 to December 1975) and then Minister of State at the Department of Energy.

Mr Smith, 40, was born and brought up in Argyll where his father was a school master. He was educated at Dunoon Grammar School and at Glasgow University where he took master of arts and bachelor of law degrees. At university he was chairman of the Labour Club and, representing the university, won the Observer Mace national debating tournament in 1962.

Mr Smith is an advocate by profession, having been admitted to Scottish Bar in 1967.

He has been MP for Lanarkshire North since his election to parliament in 1970 and was made a Privy Councillor in the Birthday Honours of 1978.

He is married with three young daughters and has his home in Edinburgh.

October surplus in payments balance

Britain's current account for October is estimated to have been in surplus by £209 million, following the deficit of £140 million in September.

There was a surplus on trade in goods in October of £119 million, following the deficit of £215 million in September. About one-third of this improvement reflected favourable movements in the more erratic elements of trade and in oil. The effects of industrial disputes at Southampton docks in August and at Ford's had a favourable impact on the change in the visible balance between September and October, possibly accounting for a further one quarter of this change. Total exports in October were valued at £3,120 million and imports at £3,001 million. The balance on invisibles is projected to have been running at a monthly surplus of £90 million.

In the three months ended October, the current account was in surplus by £212 million, compared with a deficit of £173 million in the previous three months.

Full details will be given in *Trade and Industry* next week.

British Shipbuilders loss reaches £108 m

British Shipbuilders, on Tuesday, announced a loss of £108 million before tax and after interest payments and receipt of intervention

fund assistance, for its first nine months of operations to 31 March this year. On a turnover of £547 million the final loss is £93 million after tax credits.

A very substantial part of this loss, the corporation pointed out, arose from contracts signed before nationalisation in July 1977. Also contributing were the delays in passing the nationalisation bill between 1974 and 1977, at a time of great uncertainty for the industry which was experiencing the worst world-wide depression of the century.

In the company's annual report, chief executive Michael Casey explained that the combination of political circumstances and the state of the market had led to operating conditions and a financial result for 1977-78 which was wholly unacceptable. 'It has been the corporation's immediate task to bring under control the rapidly deteriorating situation with which it had been presented.'

Processing plant opened in Durham

Allan Williams, Minister of State for Industry, attended the opening of a new fluorspar processing plant at Broadwood, near Prosterley, County Durham, on Tuesday. The plant, which has cost £2.5 million, is part of a mine run by Swiss Aluminium Mining (UK), 'Samuk', whose parent company is Swiss Aluminium of Zurich.

It is expected that government grant aid under the industry act will be well over £600,000 – about 25 per cent of the capital cost of the new plant. As well as safeguarding existing jobs, the project is expected to have created 61 new ones, bringing the workforce up to 200.

'Samuk' was formed in 1971 to develop fluorspar mining operations in County Durham, following encouraging results from two years' exploration. The company now holds mineral rights for fluorspar and lead across well over 300 km² – one of the largest mineral holdings of its kind in Britain. Major use of fluorspar is in the form of fluorcarbons for refrigerators, air conditioners, aerosol propellants, the plastics industry, aluminium and uranium ore enrichment.

IDC policy changed to help small firms

A limited amount of speculative industrial development by local authorities to provide factory units to accommodate small firms will be permitted following a change in the operation of the industrial development certificate (IDC) control for a trial period. This was announced on Tuesday by Alan Williams, Minister of State for Industry.

Mr Williams explained that he was making some changes in the current policy for granting industrial development (IDCs) in order to assist small firms. At present, firms wishing to build their own factories were able to do so, without an IDC, up to the IDC exemption limits of 12 500 sq ft in the south-east and 15 000 sq ft in other areas where the IDC control operates, but the IDC control inhibited the development of industrial estates comprising similar small units for rent.

There was a need, he said, to provide modern, rented factories for small firms who could not build for themselves and who were tied to a particular area. He therefore intended, for a trial period to issue IDCs, on request, to local authorities for a limited amount of speculative factory development which was geared to the needs of small firms. Initially, IDCs would be granted up to a total of 60 000 sq ft in any district council or London borough area but within this total no one company would be allowed to occupy floor space which exceeded the exemption limit. Mr Williams said that he would be prepared to consider granting further IDCs when most of the factories under the first IDCs in the area concerned had been built and let.

The conditions attached to the IDCs would enable the factories to be occupied by companies from anywhere in the county (or GLC area in the case of London) or by new firms originating in that area Mr Williams continued. The condition allowing any one company to occupy space up to the exemption limit would be strictly applied. He therefore expected that the main beneficiaries of the changes would be small firms, who could not reasonably be expected to move to the assisted areas, so that the new arrangements would not in any way weaken the government's commitment to a strong regional policy, nor would it reduce the priority of the assisted areas.

BL to close Southall heavy-vehicle plant

BL Ltd announced on Tuesday that it intends to close its plant at Southall. The company, known as AEC Ltd, is in the Leyland Vehicles Group, the bus and truck division of BL. The Southall closure will mean the loss of 2100 jobs. Voluntary redundancies earlier in the year have already reduced the Southall workforce from 2250.

Leyland Vehicles has recently been assessing its business situation and the Southall plant closure is part of its plan to streamline activities. It is planned that assembly of BL's Marathon trucks, which are at the top end of the company's heavy-duty vehicle range, would be moved from Southall to the Scammell plant at Watford and manufacture of the TL12 and L12 engines would be moved to the Lancashire-based factory.

Replying to questions in the house of common on Monday, Secretary of State for Industry, Eric Varley, said that he expected to receive BL's updated corporate plan from the National Enterprise Board before the end of the year. The question of further public funding of BL would be considered in the light of the government's review of the plan and the recommendations of the NEB.

Mr Varley added that he would make as much information as possible available on the plan when the government had had a chance of reviewing the NEB's recommendations, and that this would be done early in the new year.

He pointed out that there were encouraging signs from BL about its market share and that there had been an improvement in profitability. But BL's success would depend on whether it could produce cars regularly, consistently get them into the showrooms, and get people to buy those cars.

If the situation arose where the corporate plan justified more government finance, it would be made available, he said.

IBB invests in mission to Japan

A UK mission to Japan from 20-25 November is being mounted by the Department of Industry's Invest in Britain Bureau as part of its continuing promotional effort in that country.

Seminars will be held in Tokyo, co-sponsored by the Japan Location Centre, and in Osaka, co-sponsored by the Osaka Chamber of Commerce. Additionally, the team will have meetings with leading figures in the Japanese industrial and business world about their investment plans for the European market, to emphasise the welcome the UK gives to inward investment in the national interest, and to help in the formulation and development of specific projects of value to the UK.

The team will be lead by Ken Binning, head of the Invest in Britain Bureau, and will include Sir William Gray, chairman of the Scottish Development Agency, Gordon Manzie, under-secretary, Scottish Economic Planning Department, and Brian Mathers, west midlands regional secretary of the Transport and General Workers Union.

At the seminars, Mr H. Okochi, formerly managing director of the Sony (UK) company and now general manager of the international sales and marketing division of Sony in Japan, will speak on the experiences of a Japanese company in the UK.

OVERSEAS

Third CSG–US talks on liner trades end

Problems which have arisen in the liner trades between consultative shipping group (CSG) countries and the United States are the subject of talks which began in London on Wednesday. These talks, which finish today follow earlier talks in Washington in May and in London in September.

The CSG representatives was led by Gerry Lanchin, Under-Secretary in charge of shipping policy at the Department of Trade, who is the present chairman of the CSG, and included the heads of shipping policy administrations of most CSG countries.

The United States side was headed by James Atwood, deputy assistant secretary for transportation affairs at the Department of State, and included senior representatives of other US departments and agencies concerned with shipping.

The members of the consultative shipping group are Belgium, Denmark, Finland, France, Federal Republic of Germany, Greece, Italy, Japan, Netherlands, Norway, Spain, Sweden, and the UK.

Chairmen and Managing Directors

The following executives are seeking to further their careers within fields where proven experience counts and is rewarded accordingly

FINANCE

1. **Business Analyst** part ACMA a tough hardworking technical cost accountant with large manufacturing group experience. Seeks career development opportunity in anticipation of completing his exams shortly. **Age 27 Salary £8,000**
2. **Merchant Banker** BA(Cantab) ACA AIB. A wide range of City and international experience covers Eurocurrency, leasing, loan negotiations, new issues especially in Kenya and Australia. Promotion blockage. Seeking career development, location flexible. **Age 34 Salary circa £10,000**
3. **Financial Controller** B Com. CA. A thorough professional with considerable experience of financial management in Canada and Africa. He now wishes to be based in UK for family reasons. Location flexible. **Age 34 Salary circa £10,000**
4. **Money Broker.** BA(Hons) MBA. With sound City experience in leasing, oil economics and handling local authority property developments. Seeks career opportunity to widen his overall experience, and increased responsibility. **Age 32 Salary £12,000**
5. **Investment Analyst/Corporate Planner.** BA(Hons) Law, fluent French. A highly successful record as analyst, pension fund manager and property consultant. Wishes to relocate to UK for family reasons. **Age 31 Salary circa £15,000**
6. **Finance Director** BSc(Chem) ACA. With considerable experience as director of admin. in the wholesale and retail industry, with responsibility for the co-ordination of production mail order and retail of 100 substantial outlets. **Age 32 Salary £12,000+**
7. **Financial Vice President.** AIB, fluent Arabic and Malay, some German. His international experience covers banking, insurance and financial management with the construction industry. Location very flexible but would prefer Middle or Far East. **Age 41 Salary £15,000+**
8. **Corporate Finance Manager.** FCA. An impressive Group Technical Accountant (TO £500M+) with substantial international experience in major fmcg group. Promotion blockage, wishes to manage his own financial operation. Location flexible. **Age 39 Salary £15,000**
9. **Senior Financial Executive.** BSc Chem. ACA, ACMA, ACIS. An outstanding financial and commercial executive with substantial major international group experience covering all financial and many commercial disciplines handling contracts exceeding £100,000. Seeking career development. **Age 36 Salary £15,000+**
10. **Group Financial Controller.** FCA. An impressive technical financial executive whose substantial international experience covers financial and control systems planning for automotive, glass and building products. Promotion blockage. **Age 35 Salary £12,000**
11. **Finance Director and Company Secretary.** FCA with substantial management experience in retail and discount trading internationally. Especially in car products, textiles and furniture. Promotion blockage – seeking career progression. **Age 35 Salary circa £15,000**
12. **Finance Director.** BA, fluent French and German. An impressive 'high flyer' with large international group experience covering a wide range of manufactured products and services. Seeking a UK base for family reasons. **Age 33 Salary circa £17,000**

MARKETING

13. **Buyer/Saleswoman.** BSc, bilingual English/French, good German. Has 2 years experience of buying products for a major manufacturer in the electronics industry. Promotion and salary blockage, seeking career development. **Age 23 Salary circa £5,000**
14. **Salesman.** BA (Hons) Econ. MBA (Marketing), good Arabic. Well educated and articulate with a knowledge of the hospital industry. Wishes to develop his career in Capital Engineering and consumer durable goods marketing expecially in the Middle East. **Age 25 Salary circa £5,000**
15. **International Marketing Director.** BS(Vermont). An ambitious self starter with a excellent knowledge of the footwear industry in UK and USA. Seeks a greater opportunity for his energy, ability and entrepreneural skills. **Age 28 Salary £10,000+**
16. **International Salesman.** Fluent Chinese (Cantonese), good French. With exceptional knowledge of the Republic of China and a good understanding of the Far East in general. A good practical salesman in the service industries now seeks opportunity to guide a company interested in trading with China. **Age 39 Salary £7,000+**
17. **General/Sales Manager.** A most impressive and persuasive manager with ability to sell most manufactured products or services who has trained and activated a highly successful sales force. Seeking greater responsibility. **Age 31 Salary £10,000**
18. **Export Area Manager.** A tough, practical and successful sales manager with an excellent knowledge of the medical pharmaceutical and hospital supply industries worldwide – especially the Middle East. Seeks a company with sound production back up. **Age 34 Salary £8,000**
19. **Marketing/PR/Services Manager.** CAM. Fluent French, Spanish, Italian and Portuguese with some German and Arabic. Intellignet and attractive with diplomatic and commercial experience in both State and Nationalised industries of the UK and South America. Wishes to renew her industrial activity. **Age 36 Salary £8,000**
20. **Area Manager.** BA M Inst Exp. Fluent French, good German, Spanish, Russian. A very sound and reliable overseas manager with experience in electrical and consumer durable products. Following 18 years in present company now seeks greater scope. **Age 43 Salary £8,500**
21. **Operations/Sales and distribution Director** with major international group experience (TO £800M) handling food, toiletries and financial services. Has controlled a field force of 600+ and 30 000+ outlets. Seeking career move leading towards general management. **Age 36 Salary £15,000+**
22. **Marketing Director.** M.Inst Mkt. M.Inst Exp. Impressive sales experience in heavy engineering and construction aspects of industry worldwide. Very sound sales force management experience. Promotion blockage. **Age 41 Salary £10,000+**
23. **General/Export Marketing Director.** MA (Oxon) MBA (INSEAD). Fluent in 9 languages including German, French, Arabic, Tai, Japanese. A quite exceptional large group director who following 2 successful years trial in consultancy wishes to return to a line appointment. Location flexible. **Age 38 Salary circa £17,000**
24. **Non Executive Marketing Director.** Fluent French, German, Dutch, Spanish, Portuguese. An outstanding career with major electrical/electronics group in establishing new markets in 30 countries. A good knowledge of retail and rental operations. Seeking a wider area of responsibility. **Age 58 Salary negotiable**

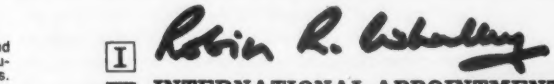
GENERAL MANAGEMENT

25. **Graduate.** BA(Hons). Fluent in German, French, Italian, Polish. Quick witted and intelligent with some experience of publishing, leisure industry and air freight management. Good PA material. **Age 24 Salary circa £5,000**
26. **Aircraft Pilot.** Full Air Transport Pilots licence with instrument rating. Recently retired from RAF and wishes to make a career in industry inside or outside the air industry. Good knowledge of Middle East. Highly suitable for private airline or air taxi firm. Location very flexible. **Age 40 Salary £6,000+**
27. **Structural Engineer.** BSc Const Eng (Hons). A tough practical and likeable engineer with design and consultancy experience. Has worked in the Middle East, London and Nigeria. **Age 30 Salary circa £12,000**
28. **Chief Executive.** M Inst Mkt M Inst Mat. Handling. A professional M/D with food manufacturing (own label) and marketing experience related to large stores. His sound marketing experience includes working in the developing countries. Location very flexible. **Age 36 Salary £20,000**
29. **Merchandise Controller.** Extensive experience in the purchase of non-food products for large retail, wholesale and mail order operations (TO £90m). Also has overseas experience. Seeking fresh opportunity because of promotion blockage. **Age 46 Salary £13,000**
30. **Chief Executive.** MA (Cantab) Law. MIEx. M Inst Mkt. Fluent Spanish, good French. A professional expatriate M/D with experience of manufacturing building materials and domestic appliances in S. America the Far East and UK. A sound marketing background. Location entirely flexible. **Age 38 Salary £12,000 (UK base rate)**
31. **General/Marketing Manager.** HND Elect Eng. Large international group experience especially in semiconductors and electronic components including microprocessors, with a good understanding of distribution problems. Seeking a career move. **Age 37 Salary £14,000**
32. **General Manager.** BSc AIFST. BSF. Good French. A food technologist with a wide range experience in dairy foods and fine chemicals, including flavours and fragrances. An able technician with a strong marketing background. Location entirely flexible. **Age 38 Salary £11,000 (UK equivalent)**
33. **Head of Personnel.** BSc MIPM. An impressive personnel executive with substantial large international corporate experience including development and training for 30 000 employees. Has both IR and works management experience. Promotion blockage. Location very flexible. **Age 39 Salary £12,000+**
34. **Chief Executive.** BA (Oxon) Law. An excellent record in the larger aspects of wholesale and retail store management. While mainly food related he also has much experience of property development. **Age 45 Salary £20,000**
35. **Chief Executive.** MICE MBIM AIArb. A first class record in both the heavy electrical manufacturing industry and in Civil and constructive engineering. An experienced company doctor who would like to move to a medium sized company. (TO £20m). **Age 47 Salary £15,000**
36. **Non Executive Director.** BSc 1st Class Hons MSc. C Eng. MIEE FBIM. Following an oustanding career in engineering, electronics and telecommunications world wide, this unusual man has much to offer as a consultant or as a Chairman of an Association. Highly personable. **Age 56 Salary negotiable**

NOTES
(i) All the above executives have been interviewed by us and we consider them to be high quality material in their particular range – there are several others whom space precludes.

(ii) If you require an executive of similar capability please contact me.

(iii) If you yourself feel that you match these standards and might benefit from a new opportunity please contact me in the strictest confidence and without any obligation.



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Home news

MLR raised by 2½ per cent

Minimum lending rate was raised from 10 per cent to 12½ per cent it was announced by the Bank of England on 9 November. The decision was made with the approval of the Chancellor of the Exchequer. In recent weeks the level of sterling short-term rates of interest has risen by about 2 per cent, reflecting in part increases in interest rates overseas and in part uncertainties about the domestic monetary outlook. This increase in minimum lending rate acknowledges this rise and is intended to establish a new level of short-term interest rates appropriate for the continuing restraint of monetary expansion.

Industry Act assistance interest rates increased

The maximum rate of interest relief grant and interest rates for loans under section 7 of the Industry Act 1972 were increased with effect from 13 November.

The rate of interest relief grant available in those cases where it would be appropriate to allow the equivalent of an interest free period on a Department of Industry loan – but where firms obtain their finance from other sources – is being increased from 13 per cent to 13½ per cent for each interest free year.

The 'concessionary' rate of interest on loans for employment-creating projects (category A) is increased from 10 per cent to 10½ per cent. The 'broadly commercial' rate of interest on loans for modernisation projects not providing additional employment (category B) is increased from 13 per cent to 13½ per cent.

Certificates of tax deposit

Rates of interest on new tax deposits were increased from 11 per cent to 11.5 per cent from 6 November. This is for deposits accepted under the terms of the prospectus (series 3) for certificates of tax deposit dated 29 August 1978 and applied in the payment of tax. The rate of interest on deposits withdrawn for cash remains at 9 per cent. The bonus payable on deposits applied in payment of tax and held for more than six months remains at 1 per cent.

Certificates of tax deposits are operated by the Inland Revenue. Deposits may be made at Inland Revenue tax collecting offices throughout the United Kingdom. The scheme is available to taxpayers generally, that is to individuals, trustees, companies or other persons and bodies, for the payment of tax. The certificates are available against tax generally, that is including income tax (other than PAYE and tax deducted from payments to subcontractors), corporation tax (including advance corporation tax), capital gains tax, capital transfer tax, development land tax and petroleum revenue tax. The rate of interest on new deposits is that determined from time to time by the treasury. This increase in the rate of interest reflects the recent rise in interest rates on comparable securities.

International standard proposed on toy safety

Development by each country of its own national safety requirements for toys had inevitably led to a situation where these requirements differed from one country to another, said John Fraser, Minister of State for Prices and Consumer Protection, in London on 2 November.

Opening a seminar on toy safety organised by the British Toy and Hobby Manufacturers' Association, Mr Fraser said that the only way in which barriers to trade could be avoided and eliminated was to have an international standard which could serve as a basis for harmonised national legislation.

He said that as a result of the efforts of the European Standardisation Organisation (CEN) over a number of years and of all the participating delegations, including the UK delegation, a European safety standard for toys was close to being published. He understood that part I, dealing with mechanical and physical properties of toys, and part II, which was concerned with flammability, were likely to be published by CEN shortly and that this should make it possible for them to be issued in the UK as parts of a new British Standard for toys.

Mr Fraser said that other parts of the European standard dealing with toxicity, aquatic toys and electrical toys would follow in due course. Together, they would add up to an extremely comprehensive safety standard which would not only have an important part to play in facilitating international trade in toys but would also be of value in ensuring that toys placed on sale in the UK and other countries were safe for use by children.

Mr Fraser went on to say that in view of the concern about skateboarding in the early part of the year, the home accidents surveillance system had been temporarily extended to include all skateboard accidents. The report on this study would be available for publication early next year. In seven months around 700 accidents have been reported by the 20 hospitals in the system. From preliminary analysis it seemed that most of the accidents did not result in in-patient treatment and it seemed that very few were the result of actual failure of the skateboard itself. Those most at risk were in the 10-14 year old age group.

The Central Office of Information was to make a television filler film emphasising the need to wear proper protective equipment and demonstrating the best falling technique. The department was also participating in the preparation of British standards for both the skateboards themselves and the appropriate safety helmets and pads and it was hoped that compliance with these standards together with educational publicity on the safe use of skateboards would go a long way to reducing the number of accidents.

Inspectors' report on Electerminations

A small inquiry committee is to be set up by the professional standards committee of the Institute of Chartered Accountants for England and Wales following publication of the 'Inspectors' Report on Electerminations Ltd' on 8 November. The inquiry is to look into opinions expressed by Department of Trade inspectors about the chartered accountants mentioned in the report.

Although it finds that the accountants involved deserve criticism, the report concludes that even if the necessary steps had been taken by the accountants at the appropriate time it was doubtful whether the position of the creditors of Electerminations, formerly known as APT Ltd, would have been materially improved.

The inspectors Anthony James Denys McCowan, QC and Alan Peter Humphries, FCA, were appointed on 7 August 1975 under the provisions of section 165(b) of the Companies Act, 1948.

At present HMSO can not sell copies of the report because of an industrial dispute in its publications warehouse, but copies will be available after the dispute has been settled. A copy of the report has been supplied to the liquidator of the company who is Mr A. A. Davis, Stoy Hayward and Company, Chartered Accountants, 54 Baker Street, London W1M 1DJ.

Iran situation no threat to oil supplies: Benn

There is no early threat to the supply of oil needed to keep the UK economy moving, Tony Benn, the Secretary of State for Energy, said on 7 November in a statement about oil supplies to the United Kingdom in the light of the Iranian situation. He said that about 16 per cent of the UK's suppliers of crude oil currently came from Iran.

Existing stocks of crude oil and petroleum products were sufficient to meet present levels of consumption for 72 days, he pointed out. More generally, the present situation did not trigger the emergency oil sharing arrangements of the International Energy Agency and the European community.

He said that he was nevertheless, keeping in close touch with the oil companies about the maintenance of supplies to the UK and the steps they were taking to secure additional supplies from other sources. He was also taking steps to watch closely the pattern of our trade in oil, Mr Benn added.

Varley visits Fairey Holding's companies

Secretary of State for Industry Eric Varley toured three of the Fairey Holdings' operating companies based at Heston, Middlesex, on 7 November. Mr Varley was accompanied by Russell Kerr MP for Hounslow, Feltham and Heston, and councillor James Duffy, the Mayor of Hounslow.

In addition to Fairey Holdings, the parent company, the Heston site houses Fairey Hydraulics, Fairey Filtration, and Fairey Nuclear – three of the 10 operating companies that comprise the group and are based in various parts of Britain.

During his tour the secretary of state talked with management, trade union representatives and other employees. He was escorted on his tour by the chairman of Fairey Holdings, Angus Murray, the group chief executive, Kenneth Bacon, and the Lord Gregson, a director of the company.

Secretary of State for Industry, Eric Varley studies a Herbert no 9 capstan lathe during his visit to Fairey Holdings on 7 November.

Job subsidy for small firms extended to March 1980

The government's £20 per week job subsidy for small firms is to be extended from 1 January.

Announcing this in the Commons on 9 November, Albert Booth, Secretary of State for Employment, said that the scheme would be open for applications until 31 March 1980.

It would have closed on 31 March next year. He explained that small manufacturing firms anywhere in Great Britain would be eligible for the subsidy, whereas it had previously been restricted to assisted areas and inner city partnership areas. For the first time it would be open to firms in the non-manufacturing sectors of industry located in development areas and inner city partnership areas.

Commenting on the extensions to the small firms employment subsidy Mr Booth said this could lead to the creation of as many as 40 000 jobs a year and he hoped that small firms, cashing-in on the brighter economic climate, would take advantage of this scheme to increase their work forces earlier than they might otherwise have done to meet increased demand for their products.

Under the scheme £20 a week is paid for six months for each additional full-time worker taken on by small firms, that is those employing less than 200. The scheme only applies to the private sector.

Youth opportunities allowance raised

An increase of £1.05 a week in the £19.50 allowance for young people participating in the youth opportunities programme was announced by the Manpower Services Commission on 7 November.

The new rate of £20.55 is paid from the first full pay week after 16 November. The increase is made in line with increases in related social security benefits raised at about the same time. It is also felt that the additional money will go some way towards meeting higher prices caused by inflation.

The increase in the allowance is about 5.5 per cent, and will cost approximately £2 million in the present year and £5 million in a full year. In raising the allowance the commission has been concerned that the programme should offer young people aged 16-18 who are having difficulty in finding employment a realistic opportunity to gain experience and preparation for work without interfering with the normal flow of young people in this age group into employment.

Launched in April this year, the youth opportunities programme aims at providing unemployed young people with experience of, and preparation for, work so as to improve their chances of obtaining suitable employment. Many of these young people have never had a job and the programme offers them experience in a wide range of situations. So far over 48 000 young people have entered the programme.

Spanish and Portuguese invited to see Gatwick

The Spanish and Portuguese governments have been invited to send high-level teams to see the advantages of operating from Gatwick Airport. This follows the British government policy statement in August that air services to the Iberian peninsula at present using Heathrow should be transferred to Gatwick and reflects its desire to do everything possible to meet the concern expressed by the Spanish and Portuguese governments.

Replying to a parliamentary question on 10 November, Stanley Clinton Davis, Parliamentary Under-Secretary of State for Companies, Aviation and Shipping said it remained government policy that all passenger air services, including those of British Airways, between London and Spain, Portugal and Gibraltar should operate from Gatwick. Talks had been begun with the Spanish and Portuguese authorities some 18 months ago. In further talks recently, involving a full exchange of views, both governments had been invited to send high-level teams to Heathrow and Gatwick to see for themselves the advantages Gatwick offered.

'We understand the concern the Spanish and Portuguese authorities have expressed and hope that we shall be able to meet it,' he said.

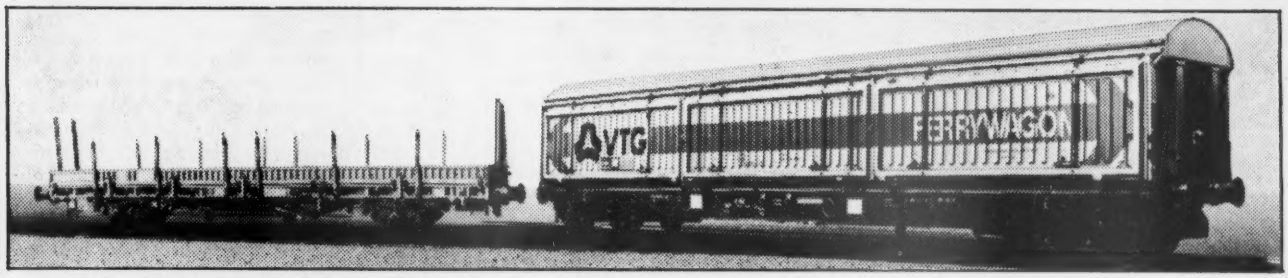
Advertising controls proposed by Hattersley

Statutory control of the content of advertising and its social and economic implications are the main points of discussion proposed in two notes sent by Secretary of State for Prices and Consumer Protection Roy Hattersley, to Lord Barnetson, president of the Advertising Association on 7 November.

Mr Hattersley said on 12 October that the Advertising Standards Authority's voluntary system of control needed statutory backing to strengthen it. The main purpose of the discussions with the Advertising Association would be to determine how best to provide the necessary statutory backing without forfeiting the goodwill of the industry upon which effective regulation would continue to depend.

Recalcitrant advertisers had to be stopped from displaying unacceptable advertisements, Mr Hattersley said. Those who deceive and mislead the public had to be made to issue corrective statements. The unscrupulous minority who flout the Advertising Standards Authority's code of conduct, willingly accepted by reputable firms, had to consider their social responsibility towards susceptible and vulnerable sections of the public who could be adversley influenced. The economy itself was susceptible to ruthless advertising that undermined competition and prevented innovation.

THROUGH TO EUROPE BY FERRY TRAIN



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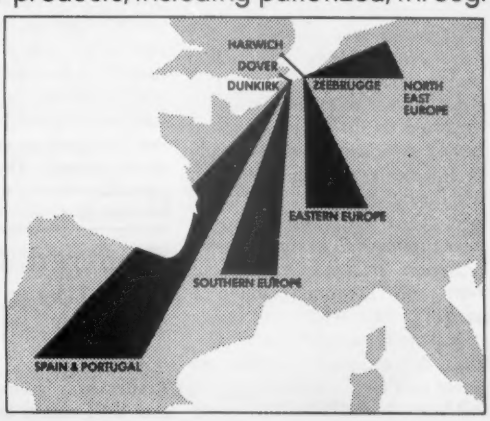
Do you export in unit loads? Are transport costs vital to you? Do you or your customer have access to private rail sidings? Do you rate security and insurance cover highly?

...OUR ANSWERS WILL INTEREST YOU TOO...

Ferry Train's new technology can help to provide answers to this sort of question. Our variety of wagons is available to carry your products, including palletized, through to Europe. Traffic can be carried in wagons specially designed to meet your requirements.

We monitor the progress of wagons by computer. Our simple procedures reduce your managerial and clerical workload.

For more information about Ferry Train contact Alan Millard, Freight Manager's Office, British Rail, 222 Marylebone Road, London NW1 6JJ.



Railfreight
Ferry Train Services

Two main weaknesses in the Advertising Standards Authority's voluntary codes of practice had been pointed to by Mr Hattersley. One was that offenders who did not subscribe to them could not be caught; the other was that sanctions against them could not be enforced. His aim was to discuss how effective the codes were and what measures were appropriate to deal with them.

Roadside advertising services to be investigated

Director General of Fair Trading Gordon Borrie, has asked the Monopolies and Mergers Commission to investigate the supply in the UK of roadside advertising services.

Roadside advertising services have been defined for the purposes of this reference as meaning the undertaking and performance of engagements to display and exhibit advertisements on sites of not less than 40 inches wide and 60 inches deep, visible from a highway, excluding sites on or within any form of conveyance. 'Highway' in this context includes a pedestrian precinct.

The director general has asked the commission to report within two years. Any person or organisation wishing to offer evidence in relation to the reference should write to the Secretary, Monopolies and Mergers Commission, New Court, Carey Street, London WC2A 2JT.

Code of practice for catalogue traders

Mail order catalogue traders have promised that their advertising and catalogues will be clear and accurate and that shoppers whose problems cannot be sorted out can get independent help. This was announced by Gordon Borrie, Director General of Fair Trading, in London on 8 November. Mr Borrie was welcoming the new code of practice produced by the Mail Order Traders' Association in consultation with the Office of Fair Trading.

Mail order trading often attracted criticism, Mr Borrie pointed out. Traders who conducted their business via advertisements in national and local newspapers accounted for many complaints and were the third highest category of traders who have given assurances of future better behaviour under the Fair Trading Act 1973. Mail order catalogue traders did not fall into this category. Their 15 million regular customers made 600 000 purchases a day yet few complaints about members of the Mota were reported to OFT. This was an example of part of an industry, which already had very high standards, striving to do even better, said Mr Borrie.

The members of the Mail Order Traders' Association have promised that: all goods will be sent to customers 'on approval' without prior payment and customers have a minimum period of 14 days in which to change their minds; full information about size, colour, materials, instructions for installation, care and cleaning and any important restrictions on use will be made available; only goods for which servicing facilities are available will be supplied and information about servicing must be provided on request; all claims and comparisons must be capable of immediate substantiation; any charges for making deliveries to very remote areas must not exceed the extra cost of doing business in those areas; they will take sympathetic and decisive action on complaints. Every catalogue will include a statement about the code of practice and procedures for complaints which cannot be settled between the buyer and the company.

Mr Borrie said that OFT welcomed this new code but would be watching to see that it was being properly observed by the participating companies. OFT would report publicly on the code's effectiveness when it had been in operation for two years.

Importance of CAC's role emphasised by Fraser

Consumer legislation over the last 15 years had considerably extended the rights and responsibilities of shoppers and traders alike, said John Fraser, Minister of State for Prices and Consumer Protection, in Aldershot on 8 November.

Opening Hampshire's first shop-front Consumer Advice Centre, Mr Fraser said that the vast majority of traders was honest, but considerable losses could be suffered by consumers who fell foul of those traders who were not. These were often the consumers who were least able to afford such losses and the result was a general atmosphere of mistrust, from which all traders suffered and the mass of them suffered unfairly.

The impact of legislation aimed at producing a fair and competitive trading environment backfired if it was not understood Mr Fraser pointed out. Consumer Advice Centres (CACs) by their professionalism had a particularly important role to play in minimising confusion and ignorance regarding the law. Consumer Advice Centres also help to ensure that consumer problems were accurately identified and where possible remedied by legislation or codes of practice. The feedback of inquiries from CACs throughout the country had been of great assistance to the Department of Prices and Consumer Protection and to the Office of Fair Trading.

The involvement of the Consumers' Association in helping to set up this centre highlighted the fact that CACs did not simply deal with problems once they had arisen, but helped prevent them occurring in the first place. Shoppers could, and did, make ill-informed and rash purchases. Self-service had its advantages but it increases the chances of this happening. CACs did not tell people what or where to buy, but could advise on alternatives and relative merits of each. The 600 000 *Which?* subscribers reflect the value of such pre-shopping information.

Traders difficulties with VAT 100 raised by CBI

Traders may have difficulty in completing the new VAT return form (VAT 100), HM Customs and Excise have been informed by the Confederation of British Industry (CBI) and other trade bodies.

The new form requires traders to include in box 11 (total outputs) and box 12 (total inputs) certain items which did not have to be included in the figures given in the corresponding boxes (boxes 16 and 17) of the old return form. The change simplifies completion of the form for most businesses, especially small businesses, but it may present certain difficulties, particularly for large traders using computers or other complex accounting systems.

Discussions are continuing with the trade bodies concerned, but, for the time being, traders who find difficulty in providing the information specified for the new boxes 11 and 12 may continue to complete those boxes on the old basis. This means that the information required in box 11 is the same as would have been included in the previous box 16, and similarly for the new box 12 and the previous box 17.

Imperial Tobacco freezes cigarette prices

Imperial Tobacco is to hold prices of cigarettes and cigarillos at their present level until 27 July next year.

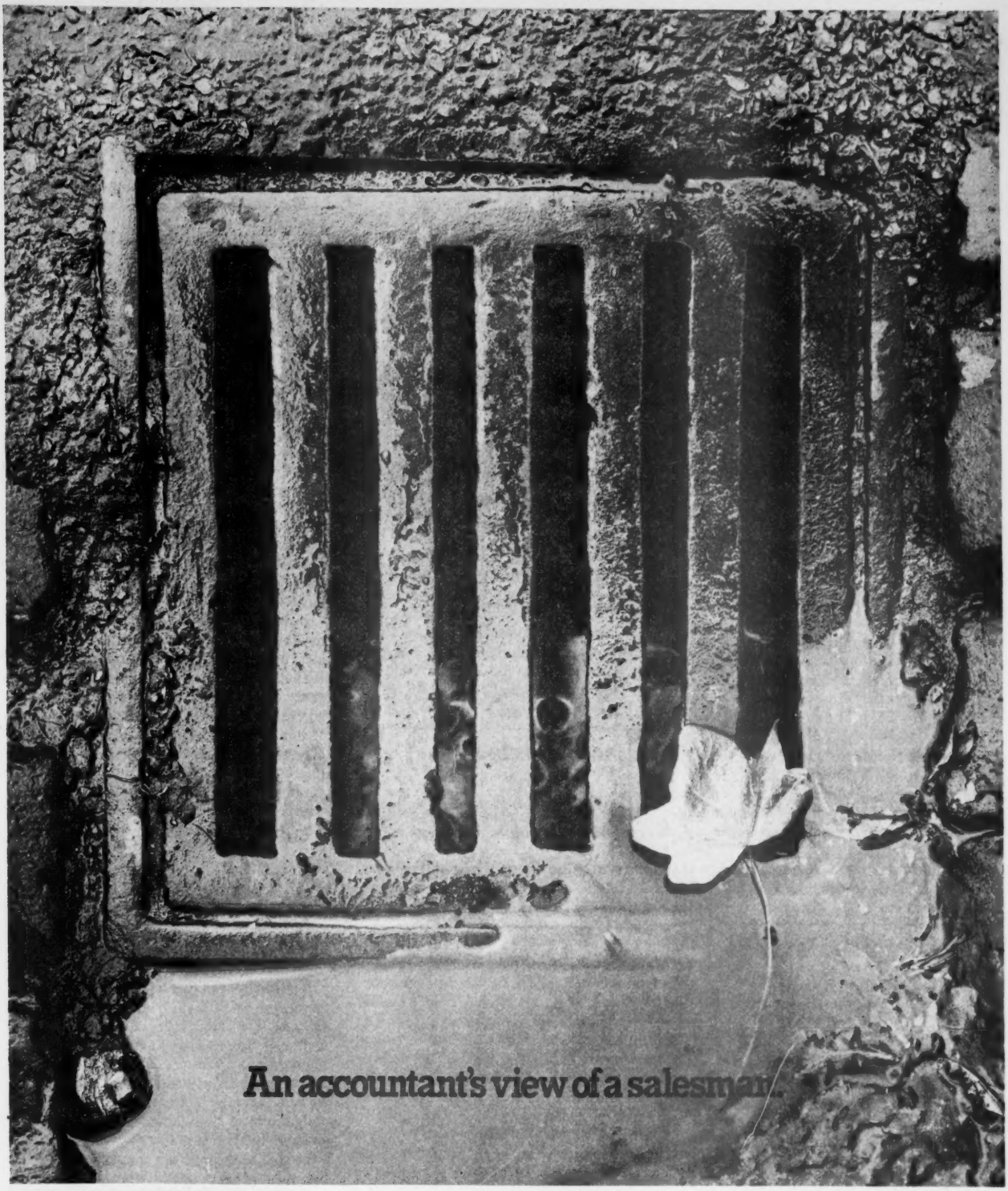
This follows a Price Commission report, available on 9 November, which has been received by Roy Hattersley, Secretary of State for Prices and Consumer Protection. Publication of the printed version of the report 'Imperial Tobacco Ltd: Increases in Price of Cigarettes and Cigarillos' has been postponed as a result of an industrial dispute at HMSO.

The commission investigated price increases proposed by Imperial Tobacco Ltd for cigarettes and cigarillos averaging £0.7295 per thousand. The company also proposed an increase in the recommended retail price of cigarettes of 2p per packet. ITL are already permitted to implement the whole of its notified increase under the provisions of the safeguard regulations and the report recommends no further restriction on the increased price for any specific period. The company has, however, informed the commission that it will not seek a further increase before 27 July 1979 unless faced with increases in costs of a nature or degree that could not reasonably have been foreseen.

Price commission to investigate BOC prices

An investigation into price increases proposed by BOC Ltd was announced by the Price Commission on 3 November. The company wanted to increase the prices of its compressed permanent gases, principally oxygen, nitrogen and argon, by an overall weighted average of 9.8 per cent and of its dissolved acetylene by an average of 9.7 per cent.

The increases applied only to gases supplied in cylinder and included higher cylinder rental and fixed charges. It was proposed to implement the increases in two stages – on the gases in November and on cylinder rental and fixed charges in January.



A recent survey by "Sales Force" finds that it now costs £12,000 a year to keep the average salesman on the road.

And much of that may be money down the drain.

How many personal visits can even the most industrious rep make in a day?

How much time is he spending between visits?

How many of the customers he sees are actually costing you money to service?

Now, don't get us wrong. Salesmen are a valuable asset to any company. Too valuable, we would argue, to be wasted.

What we suggest is that you should use them for the clients who matter most and use the phone to service the rest.

It's generally accepted that 20% of your clients account for 80% of your business.

So keep the 80% happy with a telephone call. You'll take up less of their time.

And they'll consume less of yours.

It's worth noting that the cost of a phone call hasn't risen since October 1975.

Use it more and your salesmen will cease to be a drain on your resources.

We're here to help you.

The commission has notified the Secretary of State for Prices and Consumer Protection that it intends to investigate the increases under section 4 of the Price Commission Act 1977. The investigation is due to be completed by 5 February 1979.

Anyone who wishes to make representations to the Price Commission should write to the Secretary, Price Commission, Market Towers, 1 Nine Elms Lane, London SW8 5NQ.

Selby electricity lines inquiry ordered

A public inquiry into applications by the Yorkshire Electricity Board to erect three 33 kV overhead lines has been ordered by Tony Benn, Secretary of State for Energy.

It is proposed that the lines are to be built on one of a number of alternative routes between Stillingfleet and Escrick, Olympia Mills and Riccall, and Riccall and North Duffield, all in the district of Selby, North Yorkshire. The lines are intended to provide a supply to the National Coal Board's Selby coalfield development.

The inquiry will also consider a fourth proposal for an 11 kV overhead line from Riccall to supply a nearby pumping station. The total route length of the four proposed lines would be approximately 9½ miles and the conductors would be supported on wood poles.

The inquiry will hear objections to the proposed lines and to the Yorkshire Electricity Board's associated compulsory purchase orders which have been submitted to the secretary of state for confirmation. The orders relate to the right to place, repair and maintain an electric line across lands specified in the orders.

The inquiry will begin on 21 November at the Civic Centre Portholme Road, Selby, North Yorkshire.

Merger proposals cleared

Secretary of State for Prices and Consumer Protection Roy Hattersley had decided, on the information at present before him, not to refer the following proposed mergers to the Monopolies and Mergers Commission under the provisions of the Fair Trading Act 1973.

Lex Services Group Ltd and Transfleet Services Ltd.

Rockware Group Ltd and Alida Packaging Group Ltd.

The proposed establishment of Rank Toshiba Ltd, a jointly owned subsidiary of the Rank Organisation and the Toshiba Corporation.

The acquisition by Dr Robert F. Beauchamp (Dental and Finance Equipment Inc) of a substantial minority shareholding in British Midland Airways Ltd.

Raybeck Ltd/Bourne and Hollingsworth Ltd.

Cargill Incorporated/Albion Sugar Company Ltd.

The UK interests of Schering Plough Incorporated/Scholl Incorporated.

Price Commission report on Procter and Gamble

Prices of Procter and Gamble's soaps and detergents are to be held at their present level until 17 July next year.

This follows a Price Commission report on 2 November, which has been received by Roy Hattersley, Secretary of State for Prices and Consumer Protection.

The commission investigated an average increase in price of 5.5 per cent proposed by Procter and Gamble for its range of retail soaps and detergents. The commission recommends no restriction on the increase sought by the company, nor do they propose any formal restriction on further price increases in the coming year. The company has, however, given an assurance that it will not seek to increase the price of products under investigation again before 17 July 1979 unless faced with increases in costs of a nature or degree that could not reasonably have been foreseen.

As in the recently published report on Lever Brothers, the commission suggests that the Department of Prices and Consumer Protection should take the initiative to discuss with the company ways of improving the temporary price reductions system. The department will be considering the commission's suggestion in the light of the recommendations on bargain offer claims made by the Director General of Fair Trading, on which consultations have now begun.

DoI advance factories

Merseyside. Work has started on an advance factory of 2100 m² for the Department of Industry at Wilson Road, Huyton, Merseyside in the Merseyside special development area. The premises should be ready for occupation in June 1979.

Manchester. Work has also started on an advance factory of 900 m² for the Department of Industry at Sussex Street, Lower Broughton, Gt Manchester. The factory is of the terrace unit type and is divisible into three individual units of 300 m² each. The premises should be ready for occupation in April 1979. Inquiries regarding purchase or lease of this and the Merseyside factory should be addressed to Mr C. Giles, Department of Industry, North-west region, Sunley Building, Piccadilly Plaza, Manchester M1 4BA, tel. 061-236 2171.

Moving in. R. Taylor Engineering and Plastics Ltd is to occupy an advance factory of approximately 1350 m² built by the English Industrial Estates Corporation on the department's site at Queensway, Rochdale in the north west intermediate area.

The company was formed in 1977 and already occupy premises in Rochdale of 38 000 sq ft. Taylor Engineering and Plastics manufacture, moulds and dies for the plastics, rubber and metal industries, also rigid polyurethane and glass reinforced plastics for the computer and automotive industries. The new factory will permit expansion of manufacturing activities allowing the company to employ an additional 70 people over the next couple of years.

A. W. Cole (Wire Products) Ltd has occupied an advance factory terrace unit of about 325 m² built by the English Industrial Estates Corporation on the Department of Industry's site in Strand Road, Bootle, in the Merseyside special development area.

The newly-formed company will use the premises for the manufacture of a variety of metal products including reels for barbed wire, plant supports, welded mesh panels and light metal stampings. It is expected that 21 people will eventually be employed as production is built up over the next year or two.

Hiley Engineering Company (Halifax) Ltd has occupied advance factory terrace unit premises of about 500 m² built by the English Industrial Estates Corporation on the Department's site in Shay Lane, Halifax, West Yorks.

It will use the premises for light metal fabrication and the manufacture of engineering products.

Bowater Richardson Engineering Ltd, has taken occupation of advance factory terrace unit premises of about 500 m² built by the English Industrial Estates Corporation on the Teesside Industrial Estate, Thornaby, Cleveland.

Bowater Richardson Engineering is a newly-formed company established by two local engineers Mr M. Bowater and Mr B. Richardson. The new premises will be used for general light engineering involving fabrication and machining of castings and the production of small assemblies; valves and gearbox components will be among the products manufactured. A total of 16 people are expected to be employed when full production is reached.

Bad trading extinguished

Two traders, who formerly sold fire extinguishers, have promised Gordon Borrie, Director General of Fair Trading, that they will no longer treat their customers unfairly.

The business of Fire Security Company was carried on by William Irwin Walker and John O'Pray. The latter also traded as Cimeter of Bothwell Street, Glasgow. They visited the Shetlands and Western Isles in 1976 and 1977 inducing customers to buy fire extinguishers by making false statements concerning the obligations of householders to install extinguishers in their premises. The extinguishers were sold with promises that refills, some for life, would be forwarded later.

Girobank abolishes bank charges for customers

Free current account banking for all personal customers of National Girobank was announced by post office chairman Sir William Barlow on 31 October will come into effect from 27 November.

Also, from next January, the full range of Girobank services will be extended to all personal account holders. These services include

Health and Safety Executive Publications

The 1974 Health and Safety at Work Act gave the Health and Safety Commission responsibility for keeping some 25 million people informed of guidelines and regulations for their health and safety in places of work. The Commission has undertaken progressively to revise, standardise and extend the existing regulations and recommended practices. HSC/HSE publications reflect the major programme of research, inspection and consultation which is in hand.

Priced publications are obtainable only from HMSO or through booksellers. Some general leaflets, advice and information are available free of charge from HSE Area Officers or by post from the General Enquiry Point, Baynards House, 1 Chepstow Place, London W2 4TF (Tel. 01-229 3456 ext. 734).

Annual Reports

Health and Safety: Commission Report 1976–77 (£1.25) ISBN 011 883073 2
Health and Safety: Industry and Services 1976 (£2.50) ISBN 011 883022 8
Health and Safety: Mines and Quarries 1977 (£2.25) ISBN 011 883201 8
Health and Safety: Research 1976 (£1.75) ISBN 011 883012 0
Health and Safety: Statistics 1975 (£1.75) ISBN 011 883008 2
Industrial Air Pollution 1976 (£3) ISBN 011 883074 0
Mines and Quarries District Reports 1976 (£1.50 each)
Health and Safety: Agriculture 1976 (£1.00) ISBN 011 883021 X
Health and Safety: Nuclear Establishments 1975–76 (£1.15) ISBN 011 883018 X
Health and Safety Employment Medical Advisory Service Report 1975–76 (£1.50) ISBN 011 883017 1

Advisory Committee Reports and reports of special investigations etc.

The Flixborough Disaster (£2.50) ISBN 011 361075 0
The explosion at Laporte Industries Ltd April 1975 (£1.25) ISBN 011 880333 6
The explosion at Houghton Main Colliery June 1975 (£1) ISBN 011 880328 X
The explosion at Appleby-Frodingham steelworks, Scunthorpe. November 1975 (£4) ISBN 011 88033 4
The explosion at the Dow Chemical Factory, Kings Lynn. June 1976 (£1) ISBN 011 883003 1
A survey of respiratory disease in the Pottery Industry (35p) ISBN 011 880346 8
Success and failure in accident prevention (80p) ISBN 011 880330 1
Final Report of the Advisory Committee on Falsework (£2) ISBN 011 880347 6
First Report of the National Committee on steep seam working in British coal mines (60p) ISBN 011 410248 1
Advisory committee on Major Hazards: First Report (£1) ISBN 011 880884 2
Selected written evidence submitted to the Advisory Committee on Asbestos 1976/77 (£5) ISBN 011 883004 X
Asbestos Health Hazards and Precautions, Interim statement (10p) ISBN 011 881114 2
Safe Manriding in Mines Parts 1A and 1B (£5) ISBN 011 880491 X
Digest of Pneumoconiosis 1975 (£2) ISBN 011 882006 0
Some aspects of the safety of nuclear installations in Great Britain (Replies to questions submitted by the Secretary of State for Energy to the Nuclear Installations Inspectorate in October 1976) (£1) ISBN 011 8830015
One hundred fatal accidents in construction (90p) ISBN 011 883071 6
The Fire on HMS Glasgow. 23 September 1976 (£2.75) ISBN 011 883075 9
Asbestos: Measurement and Monitoring of Asbestos in Air (£1) ISBN 011 883084 8
Asbestos: Work on Thermal and Acoustic Insulation and Sprayed Coatings (50p) ISBN 011 883083 X
Canvey Island an investigation of potential hazards from operations in the Canvey Island/Thurrock area (£10) ISBN 011 883200 X (Summary of Report (£1) ISBN 011 883203 4)

Health and Safety at Work Series booklets

3 Safety Devices for Hand and Foot Operated Presses (0 11 880862 1) (30p)
4 Safety in the use of Abrasive Wheels (0 11 880866 4) (65p)
5 Cloakroom Accommodation and Washing Facilities (0 11 880850 8) 45p)
6A Safety in Construction Work: General Site Safety Practice *(Reprinting)* (0 11 360120 4)
6B Safety in Construction Work: Roofing 1974 (0 11 880870 2) (16p)
6C Safety in Construction Work: Excavations (0 11 360101 8) *(Reprinting)*
6D Safety in Construction Work: Scaffolding (11 881452 4) (30p)
6E Safety in Construction Work: Demolition (11 360848 9) (25p)
11 Guarding of Hand-fed Platen Machines (0 11 880873 7) (18p)
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20 Drilling Machines: Guarding of Spindles and Attachments 1974 (0 11 880865 6) (35p)
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30 Storage of Liquified Petroleum Gas at Factories (0 11 880882 6) (45p)
31 Safety in Electrical Testing (0 11 880843 5) (38p)
32 Repair of Drums and Small Tanks (0 11 880852 4) (25p)
33 Safety in the use of Guillotines and Shears (0 11 880861 3) (30p)
34 Guide to the use of Flame Arresters and Explosion Reliefs *(Reprinting)*
35 Basic Rules for Safety and Health at Work (0 11 880857 5) (20p)
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41 Safety in the use of Woodworking Machines (0 11 880837 0) (£1)
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44 Asbestos: Health Precautions in Industry 1974 (0 11 880879 6) (25p)
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47 Safety in the Stacking of Materials (0 11 880839 7) 40p)
48 First Aid in Offices, Shops and Railway Premises (0 11 883132 1) (25p)
49A Safety in the Cotton and Allied Fibres Industry. Opening Processes (0 11 360851 9) (25p)
49B Safety in the Cotton and Allied Fibres Industry. Card-room Processes (0 11 360854 3) (40p)
49C Safety in the Cotton and Allied Fibres Industry. Spinning, winding and sizing (0 11 360858 6) (45p)
49D Safety in the Cotton and Allied Fibres Industry, Fabric Production (011 883078 3) (60p)
50 Welding and Flame Cutting using Compressed Gases (011 883080 5) (25p)

*** Health and Safety Commission leaflets**

HSC 2 The Act outlined
HSC 3 Advice to employers
HSC 4 Advice to the self-employed
HSC 5 Advice to employees
HSC 6 Employers Policy Statements
HSC 7 Regulations, codes of practice guidance literature
HSC 8 Safety Committees guidance to employers whose employees are not members of recognised independent trade unions
HSC 9 Time off for the training of safety representatives

*** Health and Safety Executive leaflets**

HSE 1 After Flixborough . . . 10 vital questions for industry
HSE 4 Short guide to the Employers' Liability (Company Insurance) Act 1969
HSE 5 An introduction to the Employment Medical Advisory Service

*** Agricultural Safety leaflets**

AS1 A short guide to the 1974 Act
AS2 Tractors safety cabs
AS3 Bulls
AS4 Mushroom worker's lung
AS5 Farmer's lung
AS6 Crop spraying
AS7 Guns
AS8 Noise
AS10 Children
AS14 Cyanide gassing powders – Safe handling
AS16 Brakes for tractor-trailer safety
AS21 First aid in agriculture

*** EMAS leaflets**

MS(A)1 Lead and you
MS(A)3 Asbestos and you
MS(A)4 Study of asbestos workers
MS(A)5 The health of workers engaged in antimony oxide
MS(A)6 Vinyl chloride and you
MS(B)1 Ulceration of the skin and inside the nose caused by chrome
MS(B)3 Anthrax
MS(B)4 Effects on the skin of pitch and tar
MS(B)5 Skin cancer caused by oil
MS(B)6 Occupational industrial dermatitis
MS(B)7 Poisoning by pesticides

Guidance Notes

Guidance Notes (price 30p each) are too numerous to list here but are published under five headings:
Medical
Environmental Hygiene
Chemical Safety
Plant and Machinery
General.

Enquiries to HMSO

* *Free of charge*

guarantee cards, personal loans, budget accounts and bridging loans.

Speaking at Girobank's tenth anniversary dinner in Bootle, Sir William said that the bank made an important and increasing contribution to the finances of the postal business whose post offices – more than 20 000 – were the branches of Girobank, and the postal business had contributed to a significant degree to the success of Girobank.

As part of the new free-banking package, National Girobank is also introducing redesigned cheque book wallets, cheques and transfer forms. Some of the improvements are based on suggestions by customers.

BCAL and Aurigny seek discount fares for pensioners

An application from British Caledonian Airways to introduce senior citizen's fares on its UK domestic routes as soon as possible has been received by the Civil Aviation Authority. The discount would be 40 per cent off the full normal economy fare. This is in line with fares recently approved for other UK airlines.

Aurigny Air Services has applied to the authority for fare increases of 8 per cent on its domestic routes. The company also seeks to introduce a senior citizen's fare and a discount fare on its Alderney-UK mainland services. The senior citizen's and discount fares are again similar to recently approved fares offered by other carriers, in both cases the discount would be 40 per cent off twice the full normal economy fares. All changes would take effect from 1 April next year.

The authority has received an application from Dan-Air Services for fare increases throughout their UK domestic route network. Increase sought range generally between 5 per cent to 8 per cent on Channel Islands routes, 8 per cent to 14 per cent on Isle of Man routes and 14 per cent to 20 per cent on their link city services.

Dan-Air also seek to extend the upper age limit for persons eligible for children's discounts from 12 to 16 years of age on its own services only and to introduce advance purchase excursion fares (Apex) on the Channel Islands to Bournemouth/Bristol/Cardiff/Leeds/Bradford/London (Gatwick)/Lydd/Staverton routes. Passengers using these fares need to book at least a month in advance of travel and to stay a minimum of six nights at the outward destination point.

These changes would take effect from 1 April 1979 if approved by the authority.

Revised rules for carriage of dangerous goods in ships

Revised rules which define dangerous goods and recommend how shippers should classify, package and stow them come into operation in the United Kingdom on 29 December.

The principal change is that the new rules will define dangerous goods by reference to a new edition of the code of practice known as the 'Blue Book' which is expected to be published in mid-December, and to the 1977 edition of the Imco (Inter-Governmental Maritime Consultative Organisation) IMDG (International Maritime Dangerous Goods) code. The rules thus formally accept the IMDG code for the first time, with certain exceptions which are covered by the 'Blue Book'.

Other changes are: the packing of dangerous goods in freight containers is to be brought within the requirements of the rules; in the case of carriage of dangerous chemicals in bulk and liquefied gases in bulk, the rules will be complied with if the relevant Imco codes are observed.

References to 'passenger steamers' are replaced by references to ships carrying more than 12 passengers, or by references to ships carrying more than 25 passengers or more than one passenger per 3 metres of overall length; the category 'dangerous chemicals in limited quantities' is deleted from the list of classes of dangerous goods. Chemicals previously included in this category will be shipped under special provisions given in the IMDG code; and in the case of the packaging of dangerous goods other than compressed and liquefied gases and radio-active substances, compliance with the IMDG code and the relevant packaging performance tests will be accepted as compliance with the rules.

The new rules are 'The Merchant Shipping (Dangerous Goods) Rules 1978' SI 1978, 1543, HMSO, 25p: they supercede SI 1965 1067.

Progress in metrication 'insufficient' finds board

Metrication is an established fact in most of Britain's economy. Nevertheless 'progress during the past 18 months has been insufficient judged from the point of view of both Britain's competitive strength in world markets and the long term interests of people in their daily lives.' This is the main conclusion of the report of the Metrication Board for 1977-78 published on 2 November.

The main recommendations of the report are: the retail trade should gear itself to achieve an orderly change on a voluntary basis, with an agreed timetable, for the retail sales of weighed out and measured out goods; legislative obstacles to such a change, such as the requirement to give the unit price to certain foods only in imperial, should be removed; if the voluntary approach fails to safeguard the consumer and the retailer, urgent consideration should be given to the need for legislative action; the Department of Prices and Consumer Protection should issue a statement about the implementation and the effects of the EEC units of measurement directive; speed limits and road signs should be changed to metric; government departments, local authorities and other public and private sectors of the economy should review all their activities where weights and measures are involved, particularly purchasing, trading and production, to ensure that the change to metric working is complete so far as possible.

'Going Metric – Progress in 1977/78' (ISBN 0 11 700886 9) will be available from HMSO price £1.25 plus postage.

Tax relief on unsuccessful mining applications

Tax relief for expenditure incurred by mining companies on unsuccessful applications for planning permission to extract minerals may now be granted by the Inland Revenue.

Such expenditure is capital expenditure which hitherto has not been regarded as eligible for any form of tax relief. The Inland Revenue has decided, that in future relief may be given, where the necessary conditions are met, under the mining capital allowances provisions in the Capital Allowances Act 1968.

CBI second national conference

Members of the Confederation of British Industry during their second national conference in Brighton from 6-7 November. The theme of this years conference was Britain Means Business 1978 based on a document produced by the CBI which brings together its current policies for the regeneration of British industry and commerce and for the future prosperity of the country.

New publications

Management – my God!

All is not well with management today – it is suffering from a confusion of managerial gods, says Charles Handy. The four gods or philosophies that he sees as typifying the main managerial styles are Zeus the entrepreneur, Athena the inventive, Dionysus the professional, and Apollo the bureaucrat. But the four gods do not, the author feels, always operate in the right proportions within each organisation, with incompetence, inefficiency and slackness as the unfortunate outcome.

In his controversial examination of the various styles of management in Britain today, he suggests certain tasks which need to be achieved to produce effective mix, not mix-up, of managerial styles. But if Handy's 'gods of management' help here, it is only in order to illustrate yet another hurdle – the growing problem of individualism.

In the coming five years or so, we are warned, individualism is going to confound efficiency and displace the current Apollonian (bureaucratic) trend. Handy argues that the demand for self-expression and autonomy in everyday life must be met by a more radical vision of the management task that is now being mooted. In the long term, the problem is even greater: it is not a question of how we should organise, but why we should organise. Social values are changing, and business and industrial organisations must respond to this. The whole relationship of organisations to society is coming into question. To accommodate such questioning of purpose, organisations, and hence managements will need to change radically – to become part of the community instead of just an instrument of it.

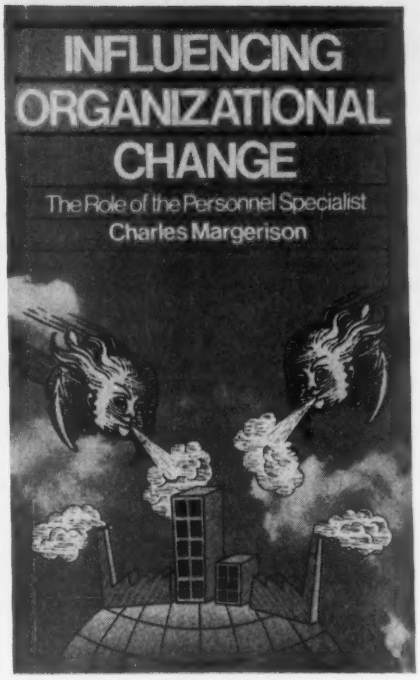
Professor Handy's views, if at times somewhat unconventional, should at least gain some response from both the manager and the managed, be it a reassessment of the managers' role or merely mild amusement.

Gods of management: how they work and why they fail, by Charles Handy. Souvenir Press, 1978. 320 pages. £5.50 (ISBN 0 285 62336 2).

New role for personnel specialists

Following the recent upsurge of interest in management and the structure of organisations, the study of organisational development has emerged. Much of the literature produced so far has been for general managers, but a recent guide takes a new angle – the role that personnel specialists can play in management and organisation development.

Writing mainly with the personnel manager and training advisor in mind, Charles



Margerison, author of 'Influencing organisational change' predicts a trend away from administrative responsibilities to greater involvement with organisational change. The author describes the changing role of the personnel specialist, the skills he or she requires and how they can best be improved. He goes on to discuss the application of different skills within the organisation.

Although not strictly a workbook for self-instruction, exercises and case studies are supplied. Most chapters end with a summary, a list of key issues covered, and questions designed to make the personnel manager think about his or her own effectiveness. The text is easy to read and relatively uncluttered with jargon. Key terms are listed in a short glossary. There is also an extensive list of references but a surprising number of these are to literature at least five years old.

Influencing organisational change: the role of the personnel specialist, by Charles Margerison. Institute of Personnel Management, 1978. 219 pages; paperback. £5.25. (ISBN 0 85292 179 9).

Marketing case studies

'Marketing represents the link between organisations and their environment. How this link is forged depends on the organisation – its mission and capacity – and the nature of the constraints arising from the environment'. With a view to developing the art, Roger A. Kerin and Robert A. Peterson have produced a collection of about 30 case studies of the marketing problems of actual businesses.

The book is written primarily for a United States readership: the firms are mostly American but include one Italian and one British. Products selected are diverse, ranging from frozen olallieberries to light aircraft and skiing holidays. Although full of fascinating titbits for the general reader, such as that semi-moist dog foods 'are made to look tempting to humans', the book is intended for the student of marketing management. Most of the case studies have been carefully prepared for class discussion by professors of marketing and abound with neat supporting tables. Cited at the end of each section are additional readings but there is no bibliography as such and no index.

Strategic marketing problems: cases and comments, by Roger A. Kerin and Robert A. Peterson. Allyn and Bacon Inc., 4 Perrin's Lane, London NW3. 1978. xii, 427 pages, £10.40. (ISBN 0 205 05980 5).

Financial management

Latest in the series of 'made simple books' – 'Financial management made simple' – is intended primarily for students, and additionally for managers, who wish to update their knowledge of business finance. To this end it covers subjects examined in the final examinations of the four accounting bodies with an eye also to CNAA and HNC degree courses (the authors are themselves lecturers in the subject at the City of Birmingham Polytechnic).

The practical nature of the book is apparent in its use of questions selected from the examination papers of the major accounting bodies and while this might deter the reader who is not working within an examination framework, it is no doubt beneficial for the majority of potential readers who are. Moreover the subject lends itself to systematic arrangement which, together with the extremely detailed contents page and index, permits the reader to 'dip' into relatively specific passages of the work – of obvious merit in revision strategy.

Definitions occur consistently where terms are introduced into the text for the first time – of value to the relatively uninitiated as well as those required to remember exact definitions of terminology. While chapters such as 'accounting under inflationary conditions' have the immediate relevance necessary to link the theory with the current exigencies of practical business finance confronting the manager, 'Financial management made simple' remains a basic textbook applicable to the needs of the student in his first years of study rather than the practising manager.

Financial management made simple, by Wilfred Hingley and Frank Osborn. W. H. Allen, 1978. xiii, 345 pages; hardback £2.95 (ISBN 0 491 02234 4); paperback £1.95 (ISBN 0 491 02244 1).

Selection of publications for review on this page does not necessarily reflect the views of the government, nor do the opinions expressed. Inquiries about this page and submissions for review should be sent to *Trade and Industry*, New Publications Page, Room LG 17A, 1 Victoria Street, London SW1H 0ET, tel. 01-215 4136.

Innovation in traditional industries

A key to success and survival for Britain's traditional wool textiles, clothing and carpets industries is their investment in more advanced technology. David Finlay-Maxwell, chairman of the Textile Research Council and of the Wool Textile Economic Development Committee, explains why.

This year finds the UK wool textile, clothing and carpet industries in a constantly changing, fluid situation, with 30 to 40 per cent overcapacity in the printed-tufted sector of the carpet industry; a clothing industry in an extremely sensitive state in relation to increasing garment imports; and an increasing penetration of piecegoods into the home market.

In common with most other industries, sales are the life-blood of the wool industry. Any industrial regeneration must start at the market place. The skill of providing the right product at the right price to the right customer at a profit calls for entrepreneurial abilities as well as design flair. It also calls for the most efficient and most economic use of manpower investment and technology.

Clothing industry

The clothing industry is on the threshhold of significant advances in the field of engineered production. The geometric precision called for by 'engineered' production of garments and in laser cutting has provided a quantum leap in technology beyond the present capabilities of most manufacturers and finishers. A maximum error tolerance of, say 5 mm, in a check or stripe dimension represents only 0.33 per cent, assuming a width of 150 cm. Yet it represents the maximum real value that can be tolerated. The textile industry must completely re-orientate its thinking and accept that the visual standards that have existed over the last 100 years are no longer acceptable. An error of one thread is invisible to the eye; to a laser beam one thread, when compared with the gap between, looks like a mountain. The whole basic concept of handling fabrics must be altered to 'automatic control', instead of visual-manual control.

The joint Clothing Industry Productivity Resources Agency/Textile Research Council project for the application of improved technology in the clothing trade is an excellent concept. Initially it may only involve some 10 companies. This is totally inadequate and ways must be sought to disseminate case histories of satisfactory improvements as soon as they have occurred. The problem is the lack of time at our disposal.

One of our weaker links lies in the absence of a clothing or a carpet research association (RA). To mitigate against this, generous support should be given to clothing and carpet research projects at existing RAs.

Carpet industry

Perhaps the highest priority in carpets continues to be in the tufted field, to engineer the yarn to give ideal tufting performance with emphasis on heavy gauge carpets in loop and cut pile, on fine gauge loop pile berbers, on fine gauge and other cut pile velours, and on continuously dyed and printed products. Carpet research needs to be developed in several fields including soil repellancy and on anti-static, flame retardant, acoustic and thermal properties.

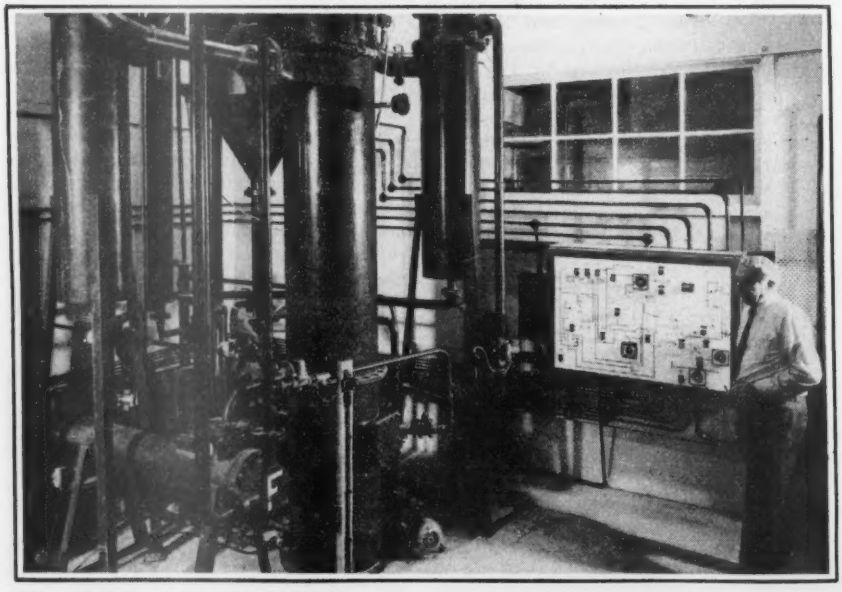
Ecological and energy considerations will probably dominate research in the production and manufacturing of fabrics. In scouring, a quick evaluation is needed of the latest IWS/WRONZ scouring process, with its potential 75 per cent saving in effluent. Colouration in the piecegoods area leaves much to be desired. Full-width processing at low temperatures must be accomplished using chemicals that are either substantive on the substrate being used or easily recovered from the effluent.

A recently reported solvent piece scouring technique is designed to eliminate both effluent and water requirements, while at the same time achieving up to 80 per cent heat recovery. This is the sort of goal to be aimed for and achieved.

More advanced technology

British wool textiles, clothing and carpets need to continually update and invest in more advanced technology, in better working conditions and in close collaboration with their workforce. The need for continuous adjustment to the latest developments must be appreciated and welcomed by everyone – management and workforce. Technology is, and must be regarded as, one of the major factors that will keep the British wool textile, clothing and carpet industries in advance of their competitors.

The picture shows the main distillation and vacuum pumper units of Gladsone's 'Autostill'. The equipment's full title is 'Azeotropic evaporation under partial vacuum conditions'. Designed by David Finlay-Maxwell and built by John Gladstone (Engineering), typical applications would include drycleaning plants but also on solvent fabric scouring.



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Wira means business

Established 60 years ago to provide a sound technological foundation for the wool textile industry, Wira's activities are now much more widespread, encompassing in particular the clothing and carpet sectors. Its success to date has given fresh impetus to the task of providing the techical services increasingly sought by its member firms and customers in today's competitive industrial world. Wira's director and chief executive, Brian King, and its research and services director, Malcolm Townsend, describe its approach.

Brian King, Wira director.

It is just 60 years since, with full government backing, Wira was set up following discussions between representatives of the wool textile industry from all parts of the UK. The industry was, in fact, the first to establish its own industrial research association. Research and development have undoubtedly brought a great many changes to the world's first mechanised industry, and the wealth of experience built up at Wira is being applied every day to the advantage of its members and customers.

Wira's drive to provide research and technical services on a contract basis is reflected in the excellent financial results it has achieved in its work over the past two years for the wool textile, clothing and carpet industries. Heartened by these, Wira is in a stong position, and is determined to move forward to tackle the challenges that will inevitably arise in continuing to provide a first-class and comprehensive technical facility for these industries.

Particularly important now is the effective application of modern technology in areas where it is currently lacking. This is in addition to carrying out a programme of basic innovation. With its widespread industrial experience and contacts, Wira is ideally placed both to judge how and where technological application is most needed, and to cater for the trends that will have a direct bearing on the commercial success of the industry in the 1980s.

Involvement with industry

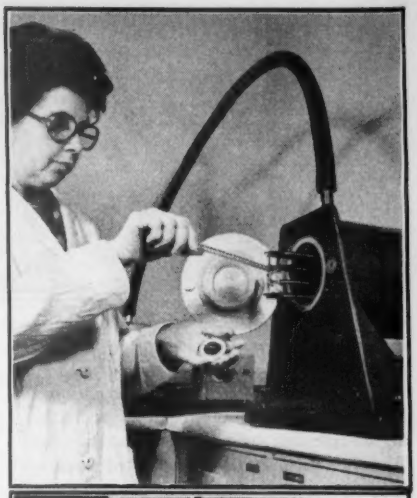
In all this work, the industry is closely involved at every stage from the initiation of an idea, through its development into a practical proposition, and on to its final application in the mill or factory. The active support and participation of members of the industry and other customers is a prerequisite to the satisfactory progression of any project. We all want results and to get them we must convince each other from the word go that we mean business.

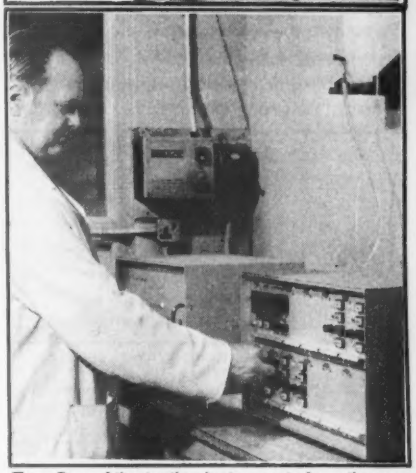
Wira tries to see that the industry benefits to the full from government funds for research and development work. Through its financial support under the Industry Act 1972, over the past few years government has underlined the importance of maintaining the viability of both the wool textile and the clothing industries in the UK, and it is to be hoped that a high level of official support for technical innovation and application will continue to be forthcoming. With the cessation in 1974 of the proportionate grant system for supporting Wira's activities, public funding for its R&D work has now to be sought by making specific project proposals to the recently established requirements boards of the Department of Industry. Not all of these applications are successful but the support achieved is encouraging. The requirements boards are willing to consider a wide range of technical development proposals, not just through the formal research channels, but also direct from industry. Wira is well placed to assist firms in preparing such applications.

Sphere of activity

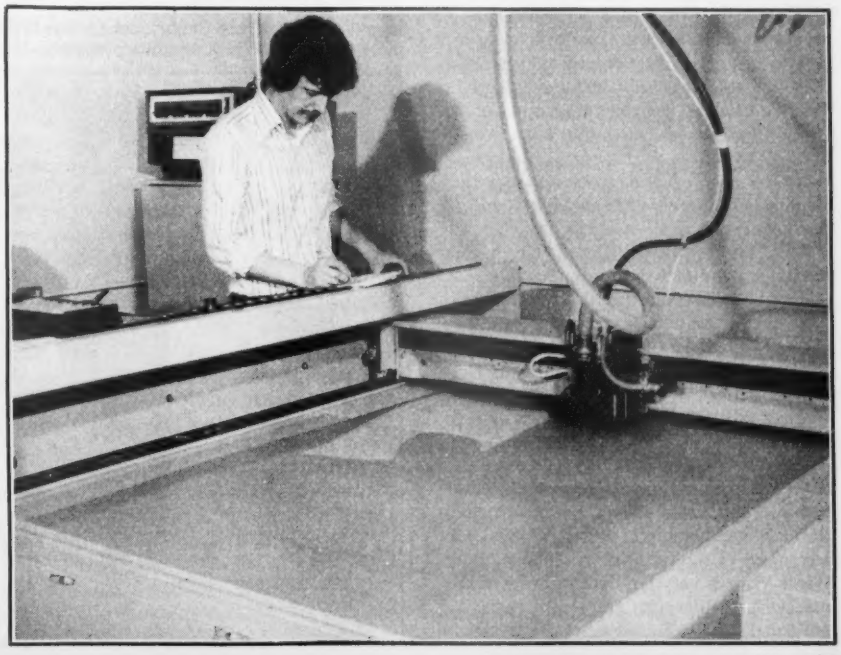
Wira's approach to the business of providing a sound technological foundation for the wool textile industry has been far from insular, and it has made determined and successful efforts to expand its sphere of activity to other areas of industry.

In raw material supply, it has been involved in the development of new methods for the 'objective measurement' of raw wool and is undertaking increased research on the use of man-made fibres in blends with wool. At the consumer product end of the manufacturing chain, it has in recent years made very considerable advances in the supply of technical





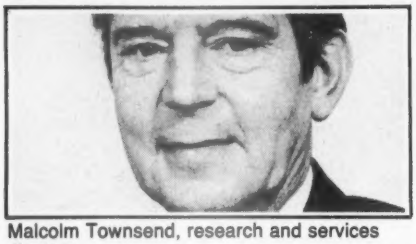
Top: One of the testing instruments from the product range manufactured by Wira is the Wira steaming cylinder for evaluating the shrinkage potential of cloth.
Above: Successful industrial trials have been carried out of Wira's pH monitor for textile dyehouses. The installation shown here is at Colourflex Ltd.
Below: Wira operates Britain's only independent computer pattern grading service for clothiers. The picture shows the automatic pattern cutting table.



services to the clothing industry which has had no industrial research association of its own. It has also been very much involved in the assessment of carpet construction and performance and is currently expanding its research activities on floorcoverings. Wira has recently been appointed as the approved testing house of the British Carpet Manufacturers' Association.

A centre of expertise

To be able to choose and operate the most appropriate processing machinery, taking



Malcolm Townsend, research and services director.

full account of today's varied environmental requirements, are two factors vital to the future success of any manufacturing company. Wira has made it its business to become a centre of expertise on both counts. Advice is given on plant of any manufacture and, in some cases, full technical assessments are carried out on particularly important machinery. This activity will be expanded substantially in the future. The service extends to textile auxiliaries, chemicals and instruments, and is totally independent of Wira's own developments.

Increasing concern with the environment has resulted in the growth of Wira's environmental services, such as pollution control, water conservation, noise reduction and energy saving. Through research and consultancy work, Wira has helped industry to respond to the social and legal pressures that have been brought to bear in recent years, and in many cases has enabled firms to save money that they might otherwise have had to spend. Such expansion of Wira's activities, to be successful, requires the backing of vigorous marketing programmes, not only to establish where the markets lie but also to promote the 'product' in question effectively, be it the result of a research project, a technical service, or one of Wira's range of testing instruments.

Taking advantage of facilities

To emphasise that 'Wira means business', it recently strengthened its marketing and sales team with the dual aim of increasing 'product' turnover and, at the same time, ensuring that, through membership of Wira, firms take full advantage of the facilities available to them. While Wira is very familiar with the home market in textiles, clothing and carpets, nevertheless a continuing marketing operation is necessary to keep the industry aware of the possibilities for, say, increasing productivity, maintaining quality at lower cost, saving waste, or achieving other economies. In particular, Wira is making a determined effort to promote the advantages of on-line process monitoring and control equipment, notably in the fabric drying and dyeing fields, developed at Wira and by other organisations worldwide.

Wira is currently seeking membership and contracts for R&D work in some 26 countries overseas, where such activity will not be against the interests of its UK members. The rest of the world is open for the export of UK instruments and equipment, together with certain non-contentious expertise in such matters as laboratory installations, water conservation, effluent treatment and other environmental services.

The challenge to improve the general level of technology in the home industries will nevertheless continue to be the main motivation of Wira's work in years to come. About one-third of the expenditure on current R&D projects is directed towards improving the productivity of processing, a further third to improving and maintaining product quality, a quarter to product development, and the remainder to legislative, environmental and other general studies.

Recent research

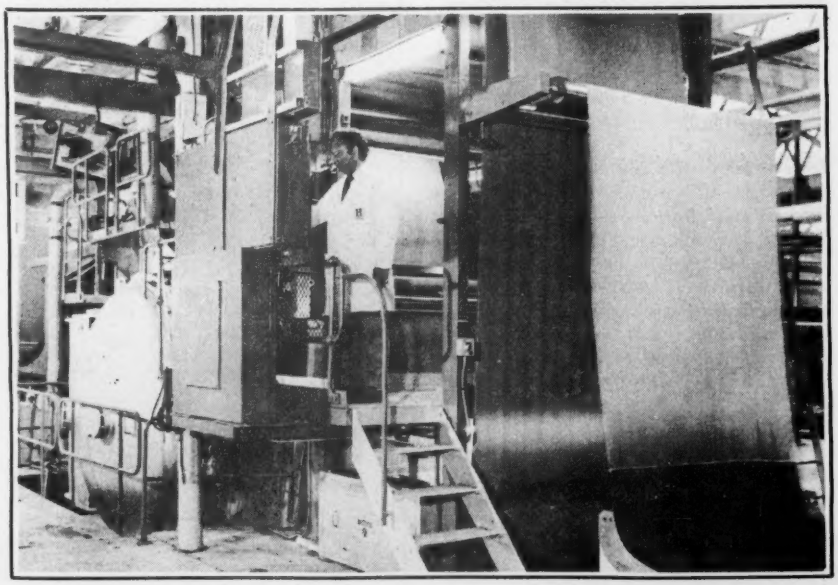
Of the many results of recent research, the Wira Stenter Monitor and the Ekofast continuous finishing process are of particular interest. The former is a monitoring device, applicable to cloth drying machines, which gives up to 20 per cent saving on energy costs, plus increased productivity. By allowing fine control of the moisture content of cloth after drying, the equipment gives firms the confidence to eliminate the traditional practice of over-drying cloth which then had to receive a degree of re-damping before subsequent processing. The further development of a fully automatic control system is at the prototype stage.

The Ekofast process is a major and very significant step forward in worsted cloth finishing which combines three previously separate processes into one continuous operation. It carries out blowing, high temperature setting and pressing and also incorporates weft straightening. Invented by Wira, Ekofast was developed in conjunction with Mather and Platt Ltd and Hield Bros Ltd, which developed and perfected the pre-production machine installed in their mill.

Wira is now developing a comprehensive and cohesive programme aimed at highlighting both the gaps in current knowledge requiring research studies, and also the areas of industrial application that would profit from the intensive use of technology transfer techniques. Much of the work will be interlinked in that it is concerned with achieving overall optimum processing routes, from fibre to consumer product. Thus, there are currently, for example, projects on the reduction of costs in long staple processing, continuous yarn dyeing, dye monitoring systems, rapid assessment of new cloth designs, garment shaping, and the effectiveness of carpet underlays.

Wira's rapidly increasing work in the clothing production area reflects the importance to the home textile industry of a healthy UK garment industry. In addition to undertaking research, it is providing extremely important services aimed at raising the productivity of the industry very substantially over the next few years. It is demonstrating how this can often be achieved at relatively low cost: in one case, production has been increased by 40 per cent, in another the throughput of a cutting room has been raised from 800 jackets to 1300 three-piece suits per week.

Invented by Wira, the Ekofast continuous finishing process for worsted cloth finishing combines three previously separate processes into one continuous operation.



Significant work

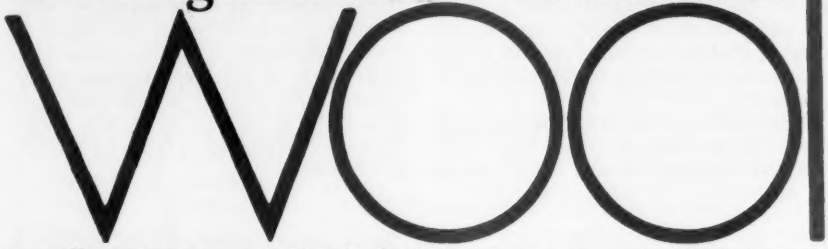
This is highly significant work and Wira is co-operating closely with the newly formed Clothing Industry Productivity Resources Agency, industry and union representatives, and government in delineating the vital role that technology has to play in ensuring the future viability of the UK clothing industry. Acquisition this year of Britain's only independent computer pattern grading service emphasises the importance Wira places on services for the clothing industry, and it is also strengthening its clothing design facility.

Overall, Wira is concerned to help the wool textile, clothing and carpet industries maintain a superior technological, and hence competitive, position. Early next year it will be setting up three major divisions – textiles, clothing and development – each of which will be responsible for reviewing the most important areas for attention and further expansion. For example, in conjunction with the British Textile Instruments Group, there is opportunity for substantial development in process control and instrumentation activities. The advent of microprocessors may well transform the industries as they are today, not only in process control applications, but also in management and planning techniques, through the ready availability of computerised systems of many sorts.

Wira's reputation as an authoritative and independent testing house is already well established in the textile, clothing and carpet fields, but there remains considerable scope for expansion not only on these fronts, but in allied industries such as chemicals and cleaning and maintenance.

Wira's future activities will be clearly focused on providing the technical services being increasingly sought by member firms and all its customers in today's intensely competitive industrial world. Its continuing programme of research will be formulated to ensure that the UK industry remains at the forefront of technological advance.

Securing a future for wool textiles



A very important element in West Yorkshire's economy, the wool textile industry is confident in its ability to secure its future. Peter Dougherty, regional director, Yorkshire and Humberside, examines the effects of two government financial support schemes on the industry's competitiveness at home and abroad.

Although the number of firms and the number of people employed have declined considerably during the last decade, the wool textile industry remains a very important element in the economy of West Yorkshire in which over 70 per cent of the industry is located.

Last year was a year of some recovery and better profitability for the wool textile industry, largely due to record exports which, for all products, amounted to £390 million. The home market, however, remained depressed and forecasts are for lower profits in 1978. The industry, which exports one-third of its output (and over 50 per cent of wool cloth), is expecting a more difficult time this year in export markets because of the lack of growth in the wool textile trade throughout the world and the strengthening of the pound.

In the home market, the stimulus in demand expected from increased consumer expenditure has not yet happened. Consequently, output in the industry this year has remained fairly stable. All sectors, however, show some decreases on 1977 levels, particularly worsted fabrics, worsted yarns and woollen and manmade fibre tops.

Government support

In an effort to encourage a modern and efficient wool textile industry, the government, through the Department of Industry, has provided financial assistance over the past five years by the introduction of two schemes in July 1973 and November 1976 respectively. Under the first stage scheme, about £70 million of investment was generated with grants of slightly less than £14 million. A recently published assessment by the department (see *Trade and Industry*, 15 September, page 600) indicates that the scheme encouraged more ambitious and comprehensive projects than would otherwise have been undertaken and has resulted in improvements in productivity, quality and range of products. This should help the industry to compete better in the home and export markets.

In addition to the assistance provided for investment, and associated with the first stage scheme, a sum of £2 million was paid to firms ceasing to trade or closing down uneconomic production units. An important element of the scheme was the requirement to scrap old machinery. Encouraged by the support given to the first scheme, and in response to a request from the industry that more time was required to formulate rationalisation proposals, the department introduced a more limited scheme in November 1976. The aim was to further encourage rationalisation and restructuring to secure the fullest benefit from the investment generated under the first stage scheme. A 50 per cent grant was introduced towards the cost of obtaining external professional advice in order to improve company performance by firms with less than 500 employees. A sum of £5 million was originally allocated to this scheme and the response by the industry has again been good.

By 31 December last year, the closing date for applications, consideration was being given to 39 rationalisation and 30 consultancy projects. All the consultancy projects have been approved and, so far, 25 offers have been made for the 39 rationalisation projects. When offers are finally made on the remaining projects, it is expected that a further £30 million of investment will have been generated by this limited scheme.

Co-operation with wool textile EDC

An important factor about the two schemes was that they were developed by the department in co-operation with the wool textile economic development committee (EDC) and employers and trade union representatives in the industry. This demonstrates that such government initiatives can be most effective if they are worked out with the co-operation and expertise of the industry concerned.

The department has also played its part in the completion of the recent multifibre agreement negotiations. These were aimed at maintaining an element of stability in the industry by the regulation of imports from the larger suppliers through immediate controls, and from the smaller supplying countries by a mechanism of control if imports became significant.

Apprehensive about the future

The industry, however, remains apprehensive about its future in a number of important respects. In West Yorkshire, there is concern in the scouring sector because of increased water and effluent charges. These have resulted from the phasing out of rebates following the passing of the 1973 Water Act. The industry maintains that these higher charges put them at a disadvantage compared with their competitors overseas. While appreciating that it has always experienced cyclical problems, the industry is concerned about what it regards as the serious nature of the present downturn. It is also perturbed at the level of low-priced cloth imports from Italy which now account for over two-thirds of total UK imports of woollen fabrics. While accepting that the Italian industry is efficient, the UK industry considers that the prices charged for the Italian imports represent unfair competition and have requested the assistance of the department to institute further investigations with the EEC. The industry is also concerned about the duties on woollen and worsted cloths exported to the United States which, on average, amount to between 45 and 50 per cent. In spite of this tariff, the industry achieved an impressive increase in exports to the United States last year which has continued into this year. This is a pointer to what could be achieved through a lowering of the United States' tariff. Discussions are currently taking place under the multilateral trade negotiations, and the department, aware of the great importance to the wool textile industry of a significant reduction in the tariff, is pressing for this through the community.

In spite of the wool textile industry's problems, many of its leaders believe that the industry will ensure a future for itself largely by its own efforts and determination. Design, innovation and high-quality standards are important factors on which the industry relies to maintain and increase its share of the home market and further expand exports. Both management and unions are united in the effort to secure the future of the industry.

A flexible approach to support for R&D

Leslie Bamford, chairman of the garment and allied industries requirements board, describes the board's role and invites applications for support for projects involving research and technical innovation.

WOOL

One of the nine requirements boards that mainly determine the Department of Industry's support of R&D and technical innovation in industry, the garment and allied industries requirements board (Garb) was established in December 1975 to provide support for the carpet, clothing, footwear, knitting, leather, textiles and textile products industries, and for the associated equipment sectors. Garb's budget for 1978-79 is £2 million.

Concerned with both the development of new and the application of existing technology, Garb's original remit was to concern itself primarily with projects likely to show benefit in the short to medium-term. Its field covers innovation and modification in processing machinery and sequences, as well as initial design and product development. Its main aim is to support the traditional industries within its orbit in their efforts to remain viable and competitive in terms of cost, quality and customer acceptability.

Most of Garb's members have an industrial background and a minority of them have academic or departmental experience. It has two standing advisory sub-committees on specialist topics, covering wet processing areas and the use of computer-based technologies. These could be expanded should any new situation arise. In all things, Garb seeks to function as expeditiously and as flexibly as possible.

Departmental support

Garb inherited the traditional Department of Industry support for the collaborative research associations, which include Wira. Garb has tried to tie its support to specific projects that have a defined benefit and significant industrial involvement, either on a shared or an individual company basis. Wira has succeeded very largely in adapting itself to these new conditions and, if it gets the necessary backing from industry, it should come into even closer contact with the sectors it exists to serve. Some firms within the wool sector have chosen to commission work from other research associations which were thought to possess more appropriate skills. Garb welcomes cross-involvement of this nature.

An increasing number of projects have come to the board from individual companies without the involvement of a research association – not all, of course, from the wool textile industry. Something like 20 per cent of Garb's total spend is used in this way. It would like to see that percentage increased, whether the work is done by the individual company or is commissioned from outside contractors, such as Wira.

successful R&D is the key to the industry's future. The board believes that a thorough application of the results of research is more likely if the concept originates in the industry itself and is actively supported by direct industrial participation at the earliest possible stage. Although the board supports technology transfer projects – the attempt to diffuse existing but unapplied information – it recognises that they are slow and expensive, possibly already out-dated, and that their success is difficult to evaluate.

Financial support for an approved project is either given by means of a grant of up to 25 per cent of agreed project costs, or on a shared-cost contract basis. The board is normally prepared to meet up to 50 per cent of the agreed costs of the latter, but special cases and special circumstances could produce exceptional treatment. A company would be expected to exploit the results of any such successful project, and the terms of the recovery of the board's outlay would be subject to negotiation based on such exploitation, although Garb usually adopts a flexible approach.

A company is responsible for the preparation and presentation of its own project, but it can be assisted by a non-departmental group with appropriate experience but no direct company affiliation. This group can also discuss ideas with company representatives to determine whether a workable project exists and, if so, whether Garb is the appropriate body to deal with it. The company has the opportunity to present its own case for decision at board level, and to answer questions about it in person as well as in writing. All projects are handled in confidence and the board attempts to give a clear, prompt and unequivocal decision.

Further information

Garb welcomes any initial approaches and inquiries of whatever nature. Any request for further information or assistance should be addressed in the first instance to the secretary, Garb, Mrs S. J. Shuttleworth, Department of Industry, Room 409, Abell House, John Islip Street, London SW1, tel. 01-211 4503.

home market

Securing its future

Helping to improve productivity at home is the job of the Clothing Industry Productivity Resources Agency (Cipra). The agency's chairman, Lewis Goodman, explains the problems and the challenge for the British clothing industry into the 1980s.

The current Gatt multifibre arrangement (MFA) has given the British clothing industry a breathing space in which to identify its problems and implement solutions that will secure its future when the period of agreements runs out in four years time. Viscount Davignon, EEC industry commissioner, told delegates bluntly at the world textile conference earlier this year that the European clothing industry must not count on the renewal of the present safeguards.

The problem and the challenge, then, for British clothing firms and its 300 000 or more employees can be seen in the juxtaposition of the following two statements:

> 'Out of every 10 garments sold in the UK at least three are now imported' – the British Textile Confederation in its 1977 pamphlet, 'The threat that keeps growing'.

> 'We have the support of many efficient and profitable British manufacturers. They produce 93 per cent of "St Michael" clothing' – chairman of Marks and Spencer in his annual statement, 1978.

Even if a significant section of the industry can regard itself as being efficient, it would be foolhardy to think that competition from the world's clothing industries – from developing countries, from new, still less-developed countries, and from sophisticated suppliers in the developed countries – will not intensify. Leaders of the British clothing industry should ask in particular why over 40 per cent of the imports come from countries which have higher wage and social security costs than in the UK.

The newly created Clothing Industry Productivity Resources Agency (Cipra) brings together all existing resources, of which the training board, research associations, official and private consulting services and other organisations, such as the Materials Handling Centre, can be made to help improve productivity. In diagnosing the needs of individual firms in the industry, Cipra interprets the

word 'productivity' in its widest sense to include company financial performance, product and people.

New technology

A highly labour-intensive industry, British clothing will no doubt benefit from the new technology: lay planning, with or without computerised controlled cutting, sewing machines using electronic and microprocessors, and programmed pressing machinery, all reflect the fact that the making of clothing has graduated over the last 20 years from the workshop stage to an industry of national importance.

More recently, the clothing industry benefited from the injection of a £15 million development scheme which will be translated into some £60 million being spent by the industry on new equipment.

The 1978 progress report of the clothing economic development committee forecast a 150 per cent increase in exports in real terms between 1975-80 (£1 billion); no increase in penetration above the 25 per cent of the home market held by imports in 1976; and an acceleration in the rate of growth of output from 3 per cent to 4 per cent a year.

Even these relatively modest aims will not be achieved unless each firm takes a realistic view of the future and makes use of all the resources available in the knowledge that the government supports the traditional industries positively by encouraging technical development and marketing skills.

St James's Park in November – without a coat! Wool textile outfit by courtesy of Slimma Ltd.

Adopting a new approach

Faced with growing competition in the home market from other countries, Britain's wool textile industry must adopt a new approach. Tom Hibbert, chairman, Wool Textile Delegation, outlines the kind of response it needs to make.

Britain has been a leading producer of textiles and textile machinery for many years. Now its wool textile industry is faced with growing competition from other countries. This growth will continue as underdeveloped countries start to manufacture their own textile products. Textiles and clothing are among the first industries these countries set up as a source of employment and to provide essential products. Produced comparatively cheaply, as a result of low wages and longer working hours, these fabrics will be imported into Britain, providing the quality is acceptable. And there is the additional factor that textiles from EEC countries also have free access to the UK market.

Complete protection for the British textile industry would not be in the country's best interest and Britain's own wool textile exports of £400 million per annum would be curtailed. But where does one draw the line?

The government has decided that the British textile industry is essential and that the present size of its wool sector is about right to meet foreseeable requirements. It has given the industry grants to purchase new and scrap old machinery; has given its full support to the industry in the multifibre arrangement (MFA) negotiations; and has said it will make sure the terms of the MFA are adhered to and action taken as soon as quotas of imports have been filled. To maintain the workforce for better times ahead, the government has also allowed temporary employment subsidies and has given the industry tax concessions due to inflated values of stock.

But what is the textile industry going to do in return?

The first thing it must do is to survive. And this calls for an entirely new approach if maximum productivity is to be achieved and the industry is to remain competitive in world markets. More needs to be achieved if its technical skills and experience are to be fully used to produce good quality goods and specialist products at competitive prices. It should also collaborate more closely with the clothing industry and encourage it to increase its exports to Europe.

In future, trade policies will have to be based to a greater degree on a tripartite strategy between the Department of Industry (representing government), the unions and the industry's own trade associations. This type of collaboration can be used to make British wool textiles more competitive and enable government action to assist the industry to be quick and effective, particularly in import surveillance.

The marketing strategy of the wool textile industry must be improved, with much closer contact between trade associations downstream so that changes in fashion and quality can be forecast and met without too much upheaval. Product promotion needs to be more effective, for example by letting the public know the advantages to be gained by buying British wool products.

Even with the combination of a fine workforce, good management and responsible unions, modern machinery and the ear of a sympathetic government, survival will be difficult for many firms in the face of the rapid increase in imports.

The Wool Textile Delegation is doing all it can to press the need for agreements with fabric exporting countries to restrict their flood of imports. The next 12 months will prove crucial.

Improved outlook for carpets

Greater stability and an improved outlook for the future is how Michael Abrahams, vice president, British Carpet Manufacturers' Association, views the British carpet industry's home market.

Carpet sales in the home market have shown a considerable improvement this year, compared to 1977. In the second quarter alone, sales were up around 20 per cent in volume terms and more than 25 per cent by value. A feature of this recovery has been the increased demand for woven carpets. With greater stability in this sector, prices have risen by some 15 per cent on the previous year, and these rises are being maintained in the market place. In the last few years, there has been some reduction of capacity in the woven sector which has contributed to the increased stability.

In the tufted sector, however, overcapacity still overhangs the market. This is most evident in the printed sector where capacity was increased enormously in the mid-1970s against the background of the previous boom in the early 1970s.

This overcapacity still exists, but is being partially overcome through new development and stylistic changes. There has been a marked movement this year towards plainer carpets. This has been dictated partly by consumer preference and partly by the distributor, who is looking for products on which he can earn a better margin. It is also taking place through the development of more sophisticated yarn styles and of new dyeing and finishing techniques, the most recent of which is the 'Gum Tak' style of carpet. Originated in the United States, this now accounts for over 30 per cent of that market. It would seem that when UK manufac-

turers get into volume production at competitive prices with this product, a large amount of business will be done.

Low import level

Imports have played very little part in the UK market hitherto, and although there has been a sharp increase in imports in the current year, they still represent a very small percentage of the overall market. This year, there have been imports at very competitive prices from the United States, and from Scandinavia, Belgium and Germany: they consist largely of styles, including velours and 'Gum Tak', not currently manufactured in bulk in the UK.

In the retail and distributive area, the most distinctive trend has been the increased strength of some large retail groups, either specialist or departmental. These have increased their share of the market within the last two years and are continuing to do so. It is too early to say at whose expense these increases are being generated.

The present scenario in the home market is one of greater stability, particularly in the woven sector. Increased consumer spending has led to a considerable upturn in demand. In the tufted area, stylistic and technological changes are showing through with a movement towards plain, semi-plain or sculptured carpets. The outlook is probably better than at any time since 1974.

export market

In a successful fashion

With a proven record in export achievement, the UK wool clothing industry has now set itself an ambitious target. But as Peter Randle, director of the Clothing Export Council of Great Britain, points out, the industry is confident of every success.

The British clothing industry has every reason to be proud of its export effort. A success story with an on-going capability has been targeted at £1 billion per annum to be achieved by 1980. The clothing export policy for the industry was set up by the Clothing Export Council of Great Britain in 1966. This was to make the free trade areas of Europe work and, at the same time, to take advantage of entrepreneurial and exotic markets, especially in the oil-producing countries. This policy meant a concentration of effort in these areas and a reduction of effort in the traditional anglo-saxon and colonial markets.

The facts are now clear. In the first seven months of this year, Britain had a positive trade balance with the EEC countries of nearly £22 million, and with the other high-cost producing sectors in Europe, including Efta, of £40 million. The total positive trade balance for the year is expected to be over £100 million and it is growing.

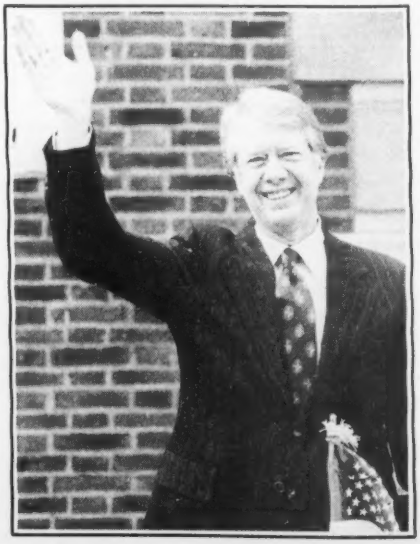
Womenswear and the knitwear producers have always been the leaders, but recently a strong surge in export effort has been shown by the menswear manufacturers. The Scandinavian Efta markets were the first target and Britain is by far the biggest supplier of clothing produced in high-cost countries for Sweden, Denmark and Norway. The same applies to the Opec countries and Britain's share of the French, Belgian, Dutch and West German markets is at last beginning to improve rapidly.

The effort has been shared between a few of the very large companies and mass of the medium and small companies in the industry. Many of the medium and larger companies have not made a major contribution since their strategy has been to supply the home market efficiently. This strategy now seems to be changing as the necessity to compete in the wider free trade area of Europe becomes apparent.

Strongest and most effective industry

Britain has an opportunity to become the strongest and most effective clothing industry in Europe. One of the major problems is to obtain sufficient production of the qualities of clothing which can be exported. This is most often the result of a lack of appropriate supplies of British-produced yarns and fabrics. Nevertheless, the industry is lucky in that many of the entrepreneurs, who themselves manage businesses, are also experts in design and have flair and ability. If the industry can mobilise sufficient additional design, marketing and management expertise, it will have a secure future in Europe. The Clothing Export Council's target means an increase of 150 per cent in real terms between 1975 and 1980. The Clothing Export Council salutes the British clothing industry's will to achieve this target.

When he visited England last year President Carter wore this suit of Yorkshire fine worsted with his initials as the decorative stripe.



Incomparable reputation

Vigorous promotion of the British label is the task of the National Wool Textile Export Corporation as its chairman, Victor Blackburn describes.

A great asset to the British wool textile industry in world markets is the incomparable reputation of its products. But in today's highly competitive conditions, it is no longer enough to let the quality and general excellence of British wool cloth and yarn speak for themselves. The prestige attached to the British label has to be sustained by vigorous promotional activities, and the British label itself must be publicised and protected.

Protection and promotion of the industry's export trade are the twin responsibilities of the National Wool Textile Export Corporation (NWTEC), based in Bradford, which works on behalf of some 500 exporting firms in all sections of the industry in Yorkshire, Scotland, Wales, the west of England, London and Northern Ireland.

In its 'watch-dog' role, NWTEC guards the interests of its members against injurious action by governments – in the form of import

quotas, unreasonably high tariffs and other restrictions – or individuals – by means of fraudulent trade marks, deceptive labelling and other malpractices.

Either for balance-of-payments reasons, or to foster uncompetitive domestic industries – or a combination of both motives – some countries drastically restrict the entry of British wool textiles. To ensure that channels of trade are kept open, NWTEC is always vigilant against the danger of new restrictions, and is quick to see and exploit opportunities to improve access to existing markets.

By means of exhibitions, shop-window displays, fashion parades and through the press and other media, the corporation conducts continuous promotion campaigns in north America, western Europe and the Middle and Far East to proclaim the merits of the industry's products. The aim of these activities is to establish recognition of British origin and the trade mark of the corporation has been registered in 40 different countries as a symbol of guarantee to the buyer that cloth has been carded (and also combed in the case of worsteds), spun and woven, dyed and finished in the UK.

British wool textile exports reached a new record level of £390 million last year, a remarkable achievement in view of the fact that world trade generally in wool textiles has become progressively more difficult over the

past two years, so that many competitor-countries have lost ground in real terms. The trading climate did not improve during this year, so it will be a considerable task to exceed last year's performance.

Nevertheless, given a reasonable degree of success in the corporation's fight against excessive tariff protection in the United States, and with comparatively new promotional strategies in western Europe and elsewhere, the wool textile industry has every confidence in its ability to progress steadily in the years to come.

British wool cloth is used by top fashion houses throughout the world. This model appeared in the spring couture collection of Chanel of Paris.

Co-operative approach to exports pays off

Geoffrey Davidson, chief executive, British Carpet Manufacturers' Export Council, explains how a co-operative approach to exporting paid off for the British carpet industry.

Export activities of the British carpet industry have increased dramatically over the last 10 years. In 1968, the percentage of the industry's total production exported was 11 per cent. In 1977, a record year of achievement, it had risen to 25 per cent. The table shows the immense progress in exports from 11.6 million sq metres in 1968 (value £21 million) to 43.7 million sq metres in 1977 (value £140.6 million).

Carpet exports 1968-1977

Year	Total value £000s	Total volume 000m²	Woven value £000s	Woven volume 000m²	Tufted value £000s	Tufted volume 000m²
1968	21.0	11.6	14.8	6.7	6.3	4.9
1969	28.0	15.7	18.2	7.8	9.8	7.8
1970	28.6	16.1	16.4	6.9	12.2	9.1
1971	32.3	18.7	17.2	7.3	15.0	11.3
1972	40.5	22.5	20.0	8.4	18.9	13.9
1973	62.7	30.8	29.5	10.1	31.8	20.3
1974	84.4	36.0	39.9	11.8	41.9	23.4
1975	74.1	28.4	34.1	9.0	38.7	19.0
1976	112.4	39.5	52.6	11.9	57.8	27.0
1977	140.6	43.7	64.6	11.8	73.3	31.2

At the British Export Marketing Centre, Tokyo.

Co-operation in the industry

Through the British Carpet Manufacturers' Export Council the industry maintains an aggressive stance towards export selling. One of the reasons for its success to date has been the willingness of individual companies to work together in opening up and accelerating sales' development in new market areas. And they have done this without losing their highly competitive edge towards each other in their ranges of merchandise and selling methods. The rapid development of high-volume sales to the EEC, the Middle East countries and the growing potential of the United States are examples of the industry's in-depth exploitation of these new marketing areas.

Over the years, a strong link has been established with the British Overseas Trade Board, with whose practical aid good progress has been made in these and in older international markets. The industry's regular participation in major carpet trade fairs in Frankfurt, Chicago, Paris, Tokyo and Toronto has helped to create the present base from which companies have expanded their world sales and detailed knowledge of the markets.

The future

Recent fluctuations in the exchange rate of the pound and the recession in international markets have slowed exports down in the first six months of this year, but the industry is hopeful that when the economic upturn occurs, it should again meet the target of 25 per cent of all UK carpet production being sold in overseas markets.

Energy saving in the wool textile industry

Energy saving in the wool textile industry is the theme of a one-day seminar to be held at Wira (formerly Wool Industries Research Association), on Wednesday 29 November. Significant opportunities for energy saving, such as the recovery of waste heat, and the practical experience of firms in the woollen industry, will be among the subjects discussed.

Organised by Wira for the Department of Industry, this seminar is one of a series forming part of the department's campaign to encourage the better use of energy in the manufacturing industry. The main objective is to show what can be achieved in practice towards the more efficient use of energy.

The seminar also provides an opportunity for the exchange of ideas and information between various levels of management and all those concerned with the use of energy in industry. The findings of the Industrial 'Energy Thrift Scheme' discussed in the recent Department of Industry report 'Energy use in the woollen and worsted industries', will be presented.

Further details of the programme and application forms for the seminar may be obtained from Wira, Headingley Lane, Leeds LS6 1BW, tel. 0532 759071.

Parliament

Monday, 6 November

Balance of payments

Hugh Jenkins (Wandsworth, Putney) asked the Secretary of State for Trade, if he would list the contributions made by various industries and services towards the balance of payments in order of importance.

Mr Meacher said that the information was not available in the form requested, as industry figures were not kept on a balance of payments basis and the trade figures were also in terms of commodities rather than industries. However the overseas trade statistics were reclassified in terms of industries and the results published in Business Monitor, M10, 'Overseas Trade Analysed in terms of Industries'. Annual figures for services were available in table 1.2 of the 'United Kingdom Balance of Payments 1967-1977'.

Exports to Japan

Michael Shersby (Hillingdon, Uxbridge) asked what was the extent of the increase in British exports to Japan in the nine month period ended 30 September as compared with the same period in 1977; in which areas the principal increase had taken place; and what was their total value.

Mr Meacher gave the following information:

	£ million
UK exports to Japan	
1977 (Jan-Sept)	347
1978 (Jan.-Sept.)	398
Increase	51 (14.7%)

The largest contributions to the increase in the value of total exports were made in the following sections of the standard international trade classification (revision 2):

Section 6 (manufactured goods classified chiefly by material) £15.5m (20.7)

Section 7 (machinery and transport equipment) £13.1m (12.3)

Section 8 (miscellaneous manufactured articles) £9.6m (23.2)

Section 5 (chemicals and related products) – £7.1m (13.0)

Trade with the six member states

Douglas Jay (Wandsworth, Battersea North) asked what had been the trade balance of the United Kingdom in manufacturing goods with the original EEC six countries in 1978 to the latest available date.

Mr Meacher gave the following information:

	£ million
First nine months of 1978	
Exports fob	6,210
Imports cif	8,017
Crude balance (A minus B)	−1,807

Source: UK Overseas Trade Statistics, September 1978 (Tables II and V).

British oil tankers

William Ross (Londonderry) asked how many British oil tankers were at present laid up due to lack of work; and how many seamen would be needed to man them.

Mr Clinton Davis replied that according to information compiled by the General Council of British Shipping, at 30 September 1978, there were 24 UK registered tankers, amounting to 1.9 million gross registered tons, laid up for lack of employment. No figures were available on the individual manning of these ships which depended on size, age, deployment and commercial manning agreements.

Costs of 'Christos Bitas' foundering

William Molloy (Ealing North) asked the Secretary of State for Trade when he expected to report to parliament concerning the total cost to public funds of the oil spillage and related problems brought about by the foundering of the Christos Bitas.

Mr Clinton Davis pointed out that it was too early to say when the full costs of the government's anti-pollution operation would be known. Although this expenditure would initially be met from public funds, reimbursement would be claimed of the whole amount from the shipowner under the Merchant Shipping (Oil Pollution) Act 1971, which implemented in the United Kingdom the International Convention on Civil Liability for Oil Pollution Damage 1969, and, if necessary, under the oil industry's voluntary scheme, the contract regarding an interim supplement to tanker liability for oil pollution (Cristal).

Oil pollution at sea

Andrew Bowden (Brighton, Kemptown) asked the Secretary of State for Trade whether his department had yet made an assessment of the extent to which the risk of pollution could be reduced by alternative levels of expenditure as proposed in the report 'Accidents at Sea Causing Oil Pollution' published by his department in July.

Mr Clinton Davis said that on 2 August, the secretary of state had announced that, as part of the follow up to the government's review of the contingency arrangements for dealing with oil pollution, proposals were to be worked out for an increase in the existing capability for dealing with oil pollution at sea with minimum harm to fisheries. That work was at an advanced stage.

Andrew Bowden (Brighton, Kemptown) asked the Secretary of State for Trade what steps he intended to take to provide additional salvage facilities and resources to the south coast of England to deal with accidents involving oil tankers to minimise the degree of coastal pollution. If, in the light of recent incidents, he was satisfied that sufficient expert salvage facilities were available at all times to deal with oil tanker casualties which presented a serious pollution threat. If, in the light of the difficulties of finding ports of refuge which were prepared to accept damaged oil tankers with the result that these might have to be towed some considerable distance, with the attendant risks of pollution and further accidents, to ports outside the United Kingdom, if he will review his policy. If he was satisfied that his department was fully aware of the salvage technology involved in dealing with an oil tanker casualty and was competent to assess the advice given by experts in the field and had the capacity to reach and implement the right decisions without delay.

Mr Clinton Davis said that on 2 August the secretary of state had announced that, as part of the follow up to the government's review of the contingency arrangements for dealing with oil pollution, a detailed review of salvage arrangements, including the resources available, was in hand. This work, which embraced the matters referred to in the questions was well advanced and included proposals for the holding of specialised equipment by his department which could be used by commercial salvors to augment their own resources. In such cases his department sought the advice of its standing panel of salvage experts from industry and the Ministry of Defence. Together with the expertise of naval architects, marine engineers and former masters of ships who served as the department's marine surveyors, he believed that the capacity to reach and implement the right decisions promptly was there.

Report on 'Christos Bitas' operations

Nicholas Edwards (Pembroke) asked the Secretary of State for Trade if, in addition to the official inquiry into the circumstances in which the tanker Christos Bitas *went on the rocks off the Pembrokeshire coast, he would also hold an inquiry into the subsequent salvage and anti-pollution operations and publish a report on the lessons learned, and ensure that the inquiry investigated and commented on the availability in the United Kingdom and the suitability of: (a) heavy duty pumps for the discharge of oil cargo, (b) compressors suitable for marine salvage operations, (c) chemical dispersants, (d) oil pollution booms and spraying equipment, and (e) tugs or other vessels equipped for anti-pollution work.*

Mr Clinton Davis said that a report on this salvage and anti-pollution operation would be published shortly. The specific matters referred to would be covered either in this report or in reports on studies set in hand following tanker casualties earlier this year.

Ministers

Department of Industry

Secretary of State: Eric Varley
Ministers of State: Alan Williams
Gerald Kaufman
Parliamentary Under-Secretaries of State: Robert Cryer
Leslie Huckfield

Department of Trade

Former Secretary of State: Edmund Dell
Parliamentary Under-Secretaries of State: Michael Meacher
Stanley Clinton Davis

Department of Prices and Consumer Protection

Secretary of State: Roy Hattersley
Minister of State: John Fraser
Parliamentary Under-Secretary of State: Robert Maclennan

Investigation of aircraft accidents

Jeff Rooker (Birmingham, Perry Barr) asked the Secretary of State for Trade if he would now answer questions relating to reasons for investigation or non-investigation of aircraft accidents.

Mr Clinton Davis said that he would not. He pointed out that in accordance with the Civil Aviation (Investigation of Accidents) Regulations 1969, the decision whether an aircraft accident was to be the subject of an inspector's investigation was taken by the chief Inspector of Accidents. He added that when he believed it was expedient in the public interest to do so, he would continue the practice of ordering a public inquiry to be held.

Appointment of auditors

Richard Wainwright (Colne Valley) asked the Secretary of State for Industry if, when he next exercised his power of appointment of auditors under the Iron and Steel Act 1975, he would have regard to comparative records of performance of various firms of accountants in relation to inflation accounting.

Mr Huckfield said that in exercising his powers of appointment of auditors the secretary of state had regard to their overall competence; their performance had to be consistent with the highest standards of the accountancy profession. The way in which the effects of inflation were provided for in the British Steel Corporation's accounts was a matter for the corporation rather than the auditors.

ECSC loan and Guest Keen and Nettlefolds

Hugh Dykes (Harrow East) asked the Secretary of State for Industry what discussions he had had with the management of Guest Keen and Nettlefolds Ltd on the purposes to which the recent European Coal and Steel Community loan, approved by the government, would be devoted.

Mr Huckfield said that loans from the European Coal and Steel Community did not require government approval and he had not been able to trace any recent discussions between his department and Guest Keen and Nettlefolds Ltd about a particular loan.

EEC social and regional funds

Hugh Dykes (Harrow East) asked the Secretary of State for Industry if he would give examples of how the EEC social and regional fund allocations to the United Kingdom in the last three years had been of specific help to small firms.

Mr Williams replied that the European Regional Development Fund contributed towards the costs of both industrial and infrastructure projects incurred in the assisted areas and Northern Ireland by government and local and national authorities. The fund had for example helped to finance industrial estate projects as well as gas, electricity, road and port schemes which should be of general benefit to small firms. The social fund was a matter for the Secretary of State for Employment.

Imports of steel

Allen McKay (Penistone) asked what was the imported tonnage of steel into the United Kingdom by categories, for the years 1970 to 1978, comparing one year with another; and what was the tonnage exported from the United Kingdom for the same period.

Mr Huckfield gave the following information:

FINISHED STEEL PRODUCTS
IMPORTS

Thousand tonnes

	1970	1971	1972	1973	1974	1975	1976	1977	Jan-Sept 1978 [1]
Ingots, blooms, billets, slabs	1 025	406	312	128	142	227	403	246	197
Bars and rods	384	404	626	591	545	418	439	447	323
Light and heavy sections	40	66	143	147	164	99	156	207	189
Hoop and strip	31	50	70	75	172	106	71	84	50
Plate and sheet (incl tinplate)	640	894	1 326	1 438	2 055	2 147	2 639	2 381	1 916
Tubes and pipes	119	209	181	394	725	728	374	348	181
Other (rails railways mats, castings and forgings)	4	4	3	5	5	12	12	6	61 [1]
Total	2 243	2 033	2 661	2 778	3 808	3 736	4 094	3 719	2 917

[1] figures for 1978 are provisional; most of the residual will be allocated to specific product headings when a fuller analysis is available.
Sources: 1 Iron and Steel Statistics Bureau
2 HM Customs and Excise

FINISHED STEEL PRODUCTS
EXPORTS

Thousand tonnes

	1970	1971	1972	1973	1974	1975	1976	1977	Jan-Sept 1978 [1]
Ingots, blooms, billets, slabs	150	192	240	195	222	257	259	416	215
Bars and rods	686	799	751	786	596	689	871	1 195	923
Light and heavy sections	483	561	476	482	521	554	574	582	401
Hoop and strip	187	163	124	179	134	99	118	116	55
Plate and sheet (incl tinplate)	1 735	2 334	2 307	1 789	1 113	842	1 071	1 359	1 032
Tubes and pipes	521	515	451	477	421	422	471	434	316
Other (rails, railways mats, castings and forgings)	80	142	95	118	126	158	179	164	80 [1]
Total	3 842	4 706	4 444	4 026	3 133	3 021	3 543	4 266	3 033

[1] figures for 1978 are provisional; most of the residual will be allocated to specific product headings when a fuller analysis is available.
Sources: 1 Iron and Steel Statistics Bureau
2 HM Customs and Excise

Shipbuilding representation at OECD

Margaret Bain (East Dunbartonshire) asked the Secretary of State for Industry who would represent the United Kingdom shipbuilding industry at the OECD November meeting when the policy predictions of the Association of West European Shipbuilders would be discussed; in what capacity each individual would attend; and how many of these had direct connections with Scottish shipbuilding.

Mr Huckfield said that the United Kingdom delegation at the meeting of the OECD working party on shipbuilding on 7 to 9 November would be led by a senior official in his department. The delegation would include economic and statistical advisers. The Association of Western European Shipbuiders had made no policy predictions, but a recent forecast of world demand for shipbuilding made by the association would be given to the working party as part of an exchange of information on forecasts of world demand made in various countries. His department was directly responsible for the affairs of the whole British shipbuilding industry but was in constant contact with the Scottish Office.

British industry and EMS

John Biffen (Oswestry) asked the Secretary of State for Industry if he would make a statement on the implications for British industrial investment and exports presented by the proposed European Monetary System of fixed exchange rates.

Mr Cryer said that the arrangements under which the proposed system would operate were still under discussion. The government had made clear their concern that these arrangements should not be prejudicial to growth in Europe. The government would also take fully into account the implications for the British manufacturing industry.

BL's corporate plan

W. W. Hamilton (Central Fife) asked the Secretary of State for Industry if he would make a statement on the future investment programme of British Leyland.

Mr Kaufman replied that BL's future investment programme would be considered by the government in the course of the review of the company's corporate plan for 1979 which the secretary of state expected to receive from the National Enterprise Board before the end of the year.

European Space Agency budget

Cranley Onslow (Woking) asked the Secretary of State for Industry why agreement on the budget and programmes of the European Space Agency had been delayed; and what was his estimate of the effect of the delay on the work of the European Space Agency, and the manufacturing industries involved in European Space Agency projects.

Mr Huckfield explained that the delay in approving the 1978 general budget covering the basic activities and the scientific programme of the European Space Agency (approximately 28 per cent of the agency's annual spend) had been due to the position adopted by certain member states, other than the UK, with regard to their participation in certain programmes of the agency. Britain deplored this action and was endeavouring to find a solution to the problem. If the situation were to continue the main effect would be a reduction in the funds available for implementing the agreed scientific programme of the agency which in turn would deprive industry of work in this particular field. The budgets for the other programmes of the agency, in particular the space applications programmes, were not affected and activities in these programmes were proceeding normally.

Tuesday, 7 November

Cost of Department of Prices and Consumer Protection

Ralph Howell (North Norfolk) asked the Secretary of State for Prices and Consumer Protection what had been the cost of his department in each year since it was formed, including the costs of consumer advice centres.

Mr Fraser gave the following information:

Out-turn prices in £ million

1974-75	1975-76	1976-77	1977-78	1978-79
2.7	3.2	3.5	3.6	3.7 (estimate)

These figures cover salaries, allied services, and general administrative expenditure.
The department's expenditure on supporting consumer advice centres has been:

Out-turn prices in £ million

1974-75	1975-76	1976-77	1977-78	1978-79
–	0.1	1.0	3.2	3.7 (estimate)

'Oil Mop' devices

Robert Adley (Christchurch and Lymington) asked the Secretary of State for Trade if the reference to the Oil Mop device, on page 123 of the select committee on science and technology report on the Eleni V *was a reference to the device being developed by Oil Recovery International, of Christchurch, Dorset, or to a device being developed by an American company.*

Mr Clinton Davis said that the reference was to 'Oil-Mop' devices supplied and operated by OMI Ltd, a subsidiary of Oil Mop Inc of New Orleans, Louisiana, USA.

Trade in manufactured goods

Bryan Gould (Southampton, Test) asked the Secretary of State for Trade what were the percentage changes in: (a) imports and (b) exports of manufactured goods for each of the last four quarters over the preceding quarter and over the same quarter a year earlier. What share in manufactured goods British exports had for each of the last 12 quarters.

Mr Meacher gave the following information:

	Percentage change compared with previous quarter		Percentage increase over corresponding quarter of previous year
	Increase	Decrease	
Oct-Dec 1977			
Imports	5.0	–	11.8
Exports	1.4	–	15.0
Jan-Mar 1978			
Imports	9.8	–	16.5
Exports	1.9	–	11.8
Apr-June 1978			
Imports	14.7	–	20.2
Exports	10.2	–	12.1
July-Sept 1978			
Imports	–	8.9	20.4
Exports	–	8.2	4.5

Source: UK Overseas Trade Statistics, SITC Sections 5-8 inclusive.

Mr Meacher said that the United Kingdom's share of world trade in manufactured goods was normally measured in terms of the UK's share of the value of the main manufacturing countries' exports of manufactured goods. The latest available information was provided in table C1 of the *Monthly Review of External Trade Statistics* (37).

Trade with West Germany

Bryan Gould (Southampton, Test) asked what was the deficit in trade with West Germany in manufactured goods so far in the current year; and what it would be expressed at an annual rate.

Mr Meacher gave the following information:

	January-September 1978
A) Exports fob	£1 608 million
B) Imports cif	2 966 million
Crude deficit (A minus B)	£1 359 million

Source: UK Overseas Trade Statistics, SITC Sections 5-8 inclusive.
A continuation of trade at the overall rates applying in the period January-September would result in a crude deficit of £1 812 million over the year as a whole.

Oil tanker incidents

Andrew Bowden (Brighton, Kemptown) asked the Secretary of State for Trade whether, in the light of the three major incidents involving oil tankers between March and October in the current year, he remained satisfied with his department's estimate that a major incident involving a laden oil tanker could be expected about once in a decade in the Dover Strait and less frequently in less congested waters, and that contingency plans should be geared to such an estimate.

Mr Clinton Davis said that serious though the *Eleni V* and *Christos Bitas* incidents had been, the amounts of oil spilled were not out of line with the generality of such incidents or remotely comparable with the amount spilled from the *Amoco Cadiz*. Consequently he saw no reason to revise the thinking underlying the review of contingency measures.

Wednesday, 8 November

Buying British

Ted Leadbitter (Hartlepool) asked the Secretary of State for Industry if he would make a statement on the need for British industry and public utilities to buy British and, in particular, where firms and nationalised undertakings received substantial loans and grants from the government.

Mr Cryer replied that public utilities and private sector companies receiving government loans or grants were encouraged to support British manufacturing industry. However it was not possible under the terms of membership of the EEC and other international obligations such as the General

Agreement on Tariffs and Trade (Gatt) to impose conditions on government assistance requiring firms to purchase British products.

Company registration fees

Charles Irving (Cheltenham) asked the Secretary of State for Trade what was the present annual fee charged by the Registrar of Companies for the retention of a company on the register; and how this compared with the fee charged in 1974.

Mr Clinton Davis replied that the fee was £20. An annual registration fee became payable under the Companies Act 1967, initially at £3. It had been increased to £20 in June 1975.

Aircraft movements at Heathrow

Barney Hayhoe (Hounslow, Brentford and Isleworth) asked the Secretary of State for Trade whether he would continue to limit and reduce the number of aircraft movements at night at Heathrow and maintain or increase the length of the Heathrow night: and whether he would arrange for night movements of aircraft at Heathrow to be fairly apportioned between the main runways in accordance with a defined and public system of alteration except when safety or other vital considerations applied.

Mr Clinton Davis said that as he had announced last November, movements at night of the noisier aircraft at Heathrow were being phased out completely by 1987. There would be a corresponding increase in the number of permitted movements by quieter aircraft while research into the relationship between aircraft noise and sleep disturbance was carried out. The restrictions on quieter aircraft and the definition of the night period would be reviewed in the light of the results of this research. Having regard to the distribution of population close to the main runways at Heathrow, he did not think that there would be any overall environmental benefit in changing the present system of runway usage at night.

National airports committee

Alan Haselhurst (Saffron Walden) asked the Secretary of State for Trade whether he would give an account of proceedings to date of the national airports committee.

Mr Clinton Davis replied that the Advisory Committee on Airports Policy had held its first meeting on 20 September when it considered its methods of work and the main issues to be examined in its analysis of the longer term options for handling air transport demand.

Imports of live cattle

Geraint Howells (Cardigan) asked the Secretary of State for Trade how many live cattle had been imported from Ireland during the last six months; and what were the corresponding figures for 1977; and how many live cattle had been imported from Northern Ireland during the last six months; and what were the corresponding figures for 1977.

Mr Meacher gave the following information:

	UK imports from Irish Republic [1]	Sent from Northern Ireland to Great Britain [2]
Apr-Sep 1978	263 933	275
Apr-Sep 1977	145 340	688

Sources: [1] Overseas Trade Statistics of the United Kingdom (SITC Sub-group 001.1 – live animals of the bovine species). [2] Northern Ireland Department of Agriculture (figures exclude cattle imported on direct consignment from the Irish Republic).

Thursday, 9 November

Powers to reduce prices

Norman Lamont (Kingston upon Thames) asked the Secretary of State for Prices and Consumer Protection if he would list the powers that he or the Price Commission had, specifying the sections of existing legislation, to order firms to reduce prices because they have awarded wage claims in excess of the government's norm.

Mr Hattersley explained that neither he nor the Price Commission had the power to restrict prices simply on the ground that a firm had reached a pay settlement above the government's pay guidelines. However, in exercising their respective functions under the Price Commission Act 1977, both he and the commission had regard to the full range of matters referred to in section 2 of the act. These included the desirability of encouraging reductions in costs by improvements in the use of resources and of securing reductions in prices of goods and charges for services in consequence of such improvements. Increases in labour costs clearly had to be taken into account.

Noise insulation grant schemes

Neville Sandelson (Hillingdon, Hayes and Harlington) asked the Secretary of State for Trade if he was aware that some people living near Heathrow might lose entitlement to grants for noise insulation because the work could not be completed by 31 December 1978; and if he would extend the date for completion.

Mr Clinton Davis said that he understood that because of the large number of applications that were received before the closing of the former noise insulation grants schemes for Heathrow and Gatwick, it was unlikely that all the work could be completed by the end of this year. He had decided, therefore, to extend the time allowed for completion of this work by six months. The necessary statutory instruments will be laid before the Commons as soon as possible.

Industrial democracy

Robert Kilroy-Silk (Ormskirk) asked how many trade unions had responded to the white paper on industrial democracy; and how many of them had rejected the proposals for worker directors; how many commercial and industrial organisations had responded to the white paper on industrial democracy; and how many of them had rejected the proposals for worker directors; and which organisations supported the idea of worker directors.

Mr Dell said that his department had received representations on the white paper on industrial democracy from the TUC, the CBI, the British Institute of Management, the Institute of Directors and about 70 organisations and firms. It was for the bodies concerned to decide whether their representations were for the public record.

Industrial progress in the south-west

Terry Walker (Kingswood) asked the Secretary of State for Industry what steps were being taken to regenerate industry in the south-west region; and if he was satisfied with current industrial progress.

Mr Cryer said that the selective assistance schemes operated under section 8 of the Industry Act 1972 were available throughout the south-west in addition to the regional incentives to industry available in the south-west assisted areas. Progress had been satisfactory given the current world-wide depression.

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Technology news

EEC climatic research programme proposed

The European commission has sent to the council of ministers an ambitious five-year research programme on climatology which it would like to see started at the beginning of 1979. The research would aim at providing greater understanding of the forces that influence climate, and how change in the shorter or longer term may be predicted. The work would be linked with other research in the field, particularly with that of the World Meteorological Organisation (WMO) and the global atmospheric research programme (Garp) sponsored by the International Council of Scientific Unions.

.Within the last 20 years, unexpected weather extremes throughout the world have not only upset the meteorologists but in some cases damaged crops, halted industry and even, as the drought in the Sahel, deeply affected a whole way of existence.

The commission points out, however, that present day society is more vulnerable than in the past because of the dramatic effect climatic change can have on limited food and water reserves, allowing little or no safety margins to a steadily increasing world population and to an expanding industrial system.

Climatological research is highly complex and multi-disciplinary. The commission proposes imposing a framework on community research by concentrating on the mechanism and behaviour of climate, and the interaction between climate and man. In addition, the programme would include two 'special activities' – the establishment of an interdisciplinary group for the study of climatic impacts, and systematic collection of European climatic data – designed to guide and support the basic research work.

Research into the mechanism and behaviour of climate should gain a deeper insight into the workings of climate, and should take the form of the reconstruction of past climates and of improving climate prediction through the use of climate modelling. The British Meteorological Office and the European Centre for Medium-range Weather Forecast (ECMWF) at Bracknell are already engaged in such studies.

On the subject of climate and man the emphasis would be on short-term variability and impacts, with the aim of arriving at reliable diagnosis and projections. The commission proposes that the research should concentrate particularly on climate and weather effects on land, water and energy resources, and the evaluation of climatic hazard or sudden change. In addition there would be research on atmospheric chemical pollution, with special emphasis on the accumulation of carbon dioxide, and the release of energy.

The commission notes that between 1860 and 1970 carbon dioxide concentration in the atmosphere showed a 10 per cent increase in 110 years. By the year 2020 the concentration could have doubled. This could result in a 2 per cent increase of temperature near the earth's surface. Scientists are divided about the effect of such heating, but the commission suggests that it could lead to climatological changes caused by the shrinking of the polar ice-caps. Thermal pollution caused by burning of fossil fuels and from nuclear energy may also present future hazards.

The commission proposes to implement the programme through cost-sharing contracts with private and public research institutions in the member countries. It would be managed by the commission services, aided by an advisory committee on programme management. The maximum community contribution for the five year period would be 8 million European units of account, £5.4 million. The programme would be submitted after two years for review and possible revision on the basis of results achieved and new research needs.

Microprocessors star in design engineering show

Conference sessions on microprocessors, computers and other electronic technology for mechanical engineering designers, and a considerable presence on the exhibition stands from most of the pacemakers among suppliers of the new technology are a major feature of the 'International design engineering show and conference' which is being held in Britain for the first time at the National Exhibition Centre, Birmingham, on 4 to 8 December.

This timely emphasis on microelectronics is marked by the Department of Industry's participation at the exhibition and conference to spell out the new aid programmes to assist in training industry's product designers to make full use of microprocessors. Special interest has been aroused by the inclusion of practical 'hands-on' seminars about microprocessors, at which delegates will programme their own small scale controllers.

Organisers Clapp & Poliak Europe Ltd stress that micro-electronics – though inevitably grabbing all the headlines – are only part of a big, broad-based event designed to explore all aspects of modern product design and show the pace of several fast-moving technologies.

The 'International design engineering show and conference' first in Britain after 25 successful years in the United States, sets out to review the design challenges and opportunities across all sectors of industry. The conference programme was planned by a team led by Sir Monty Finniston and is organised in association with the Institution of Mechanical Engineers. It contains 16 main themes, each a separate discreet session in its own right timed to last half a day, so that delegates can schedule their time most productively between conference and exhibition halls. In all, some 50 papers are being presented.

There are in addition a series of five separate seminars: one of the two offering practical experiments with microprocessors is a repeat of an event that stole the show at the 'American design show' in Chicago in April. Attendance at this event, repeated on four days of the conference, is limited to 40 each day.

The conference opens 4 December with a look ahead at the problems facing designers in the next decade, and beyond. The opening paper is given by Derek Whittaker, product development manager at GKN and former Leyland chief. From the design viewpoint, the motor industry represents international competition at its fiercest, with rewards for good products at their highest – an international cauldron of design engineering with lessons to be drawn for almost all other branches of industry.

There follows a joint presentation from Professor Sir Hugh Ford, professor of mechanical engineering, Imperial College of Science and Technology, and Dr Ewen M'Ewen, director and chief engineer of Joseph Lucas Ltd. Their paper is aimed at the heart of conference delegates' interests, and deals with design for production from both theoretical and practical experience gained by two of design engineering's leaders. Professor John Pick, professor of materials technology at the University of Aston in Birmingham, ends the first session with a paper on the economic use of materials.

Government interest in microprocessors is given weight in that the chairman for the session 'Microprocessors for the designer' will be Dr Duncan S. Davies, chief scientist and engineer to the Department of Industry.

Further conference and exhibition details are available from: The Conference Secretariat, International Design Engineering Conference, Monks Hill, Tilford, Farnham, Surrey GU10 2AJ, tel. Runfold 2066/3143.

Computing power added to viewdata . . .

Computer Analysts and Programmers Ltd (CAP-CPP) have developed new software techniques to bring mini- and micro-computer power to users of the Post Office Prestel viewdata service. It opens a mass market for computer programs distributed via viewdata to potentially hundreds of thousands of home and office-based businesses in the UK alone. As viewdata is also being exported these figures rise into millions of potential users.

CAP-CPP uses a technique called viewdata terminal programming (VTP) which provides the essential software interface between Prestel and computer terminals from a variety of manufacturers. Such a terminal could be a viewdata television receiver with extra microprocessing power built in or it might be a regular office business computer. The company is already working with GEC Telecommunications Research Laboratories on a prototype terminal.

Among those who could benefit from the VTP software facilities are the information providers who require computer power to assist in the preparation of thousands of pages of information for viewdata, as well as computer, television and other electronics companies manufacturing the subscribers's devices.

At the heart of VTP is CAP-CPP's revolutionary MicroCobol language and development system for microprocessors. Whereas other computer languages have to be adapted to fit different makes of processor, MicroCobol is entirely independent of the type of computer on which it works and consequently a variety of electronics manufacturers could take advantage of the markets opened by the development.

. . . and Prestel goes to Moscow

Prestel, the Post Office's viewdata system which enables people to call up boundless information over the phone and display it on their tv sets, makes its first appearance in an east European country next month. It is being shown in Moscow on 5 December to an audience of Soviet government officials. Prestel can be readily adapted to other languages. It has so far been demonstrated in 17 other European languages.

For the Moscow presentation, a number of demonstration pages have been set up in Russian, in the cyrillic characters of the Russian alphabet. Currently the Post Office's research centre is working on producing viewdata in other languages with their own alphabets – particularly Arabic, Greek, Hebrew, and Katakana (phonetic Japanese).

Since its unveiling three years ago, viewdata – invented entirely by the British Post Office and marketed in the UK under the trade name Prestel –has generated worldwide interest.

To maintain Britain's world lead with this development, the Post Office last year set up a special international promotions unit. As a result of the unit's vigorous sales effort, the British Post Office has exported its viewdata computer programs to west Germany and the Netherlands, and is currently negotiating a similar deal with Hong Kong.

For the United States, the Post Office is concluding an agreement with Insac Data Systems for launching a viewdata service in America during 1979. To this end, Prestel has already been demonstrated on tv sets working on the American 525-line standard.

At present the Post Office is in discussion with a number of interests and administrations overseas with the aim of arranging further sales of viewdata software. And it provided valuable advice to Finland for its own trial viewdata service, to be known as Telset, which is compatible with Prestel.

SRC backs marine technology research

The north-west region Marine Technology Consortium has been awarded a Science Research Council grant of £828,000 for a three-year programme of multidisciplinary research into marine technology problems. The consortium comprises the Universities of Manchester, Liverpool and Salford and the University of Manchester Institute of Science and Technology (Umist). The programme consists of twenty projects in the areas of environmental forces, fluid mechanics, structures and materials, economics and life sciences.

This is the fifth major award made by the SRC's marine technology directorate and complements those made to London (Imperial College of Science and Technology and University College), Glasgow (Glasgow and Strathclyde Universities), Edinburgh (Heriot-Watt University) and Newcastle in 1977.

The research programme to be carried out by the north-west region consortium has been developed over the past year in the course of detailed discussions with the council's director of marine technology, and advisers from universities, government and industry.

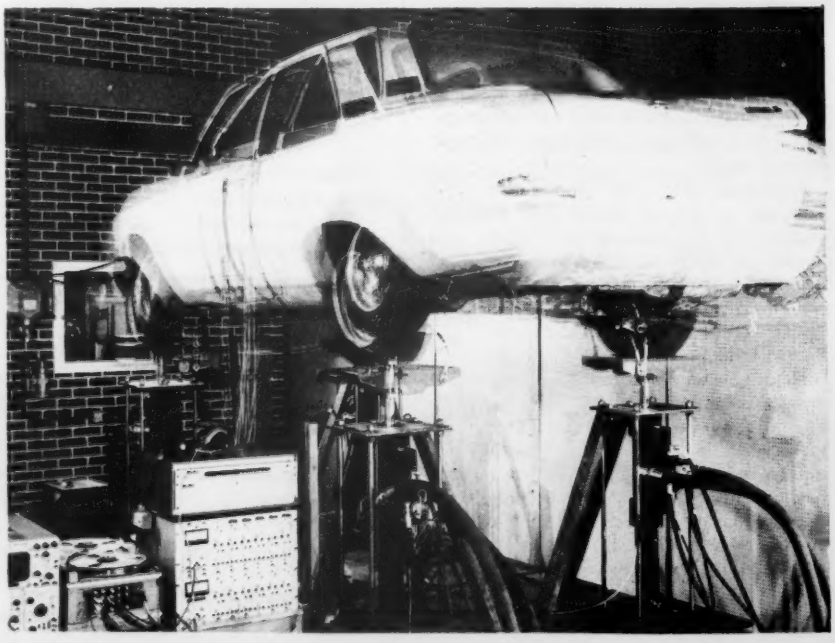
The aspect of the programme covering environmental forces involves five projects at Liverpool and Salford, with emphasis on wave loading and particle dynamics. The fluid mechanics aspect consists of six projects at Liverpool and Manchester, concerning both coastal and off-shore problems with some emphasis on sediment transport.

Structure and materials will be covered by five projects at Liverpool, Manchester, Umist and Salford, concerning welded structures, construction of pressure vessels, corrosion monitoring and concrete materials.

Two economics projects at Manchester and Umist will be concerned with project appraisal and management and sea bed materials policy. On life sciences, two projects at Salford University will be concerned with carbon dioxide detection in diving operations and gas purification methods.

Patterns engineered at NEL

This car's dynamics are being studied under closely controlled conditions in a new film produced for the Department of Industry's National Engineering Laboratory at East Kilbride near Glasgow. 'Pattern for Engineering' outlines the work of the laboratory and features equipment for testing, evaluating and calibrating a wide range of engineering products; and the establishment of national and international standards. The laboratory, which has approximately 850 employees, also creates original designs and develops them to the prototype stage, some of which are illustrated in the film. 'Pattern for Engineering' is available from the Central Film Library, Government Buildings, Bromyard Avenue, Acton, London W3 7JB, or through the Scottish Central Film Library and the Welsh Office Film Library.



New products

Freepost reader service

For further information on items in this section, circle the corresponding number on the reader services page near the end of the magazine.

High-accuracy DVMs feature auto-calibration

Datron Electronics Ltd of Norwich has introduced two premium digital voltmeters which have a number of unique features, including automatic calibration. The new 'Autocal' voltmeters are called the 1061 and 1071, with 5½ and 6½/7½ digits respectively.

In 1976 the company decided on a policy of expansion by developing a new product, with the vast United States market especially in mind. The management decided, in the words of chairman Geoffrey Cennell, 'to make the best voltmeter in the world'.

The project secured the backing of the National Research Development Corporation to the extent of half the £250,000 R&D costs. A team of young engineers put a total of 15 men-years into the project.

For the first time the company has used a microprocessor to enhance accuracy. Both operating memory and calibration memory are microprocessor-controlled. It is said to be the first DVM in the world to have the facility of automatic calibration at the flick of a switch, saving a five-hour job.

Both the Autocal instruments have automatic calibration as a standard feature which for the first time, Datron claims, covers every range and every function of the instrument, including high frequency ac. The calibration routine is extremely simple, allowing full calibration of every range or function in a few minutes and obviating the need for even the conventional annual calibration.

The instruments have automatic read-out of maximum limits of uncertainty for any particular measurement. When an 'error' key is pressed, the instrument collates all the factors influencing accuracy and indicates maximum possible reading error in percentage or parts per million for that particular measurement.

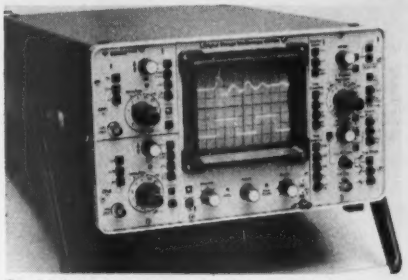
Top of the new range is the 1071 which, in its normal mode, has seven digits but in its special averaging mode increases to 8 digits giving a resolution of better than 10 nanovolts or 0.05 ppm. The averaging system has been designed to take real advantage of the eighth digit since it is based on a cycle of 16 readings, each reading being offset by a sixteenth of a digit, so that the mean represents the true value of the signal between consecutive numbers on the normal least significant digit.

Accuracy for the 1071 is claimed to be better than ± 3 ppm reading ± 1 ppm full scale in its 6½ digit form and typically twice as good in averaging of dc voltage. Both instruments cover dc and true rms ac voltage and current, resistance and ratio, whilst the 1061 also has dB measurement in place of the averaging facility of the 1071.

Use of a microprocessor has not only helped the achievement of some of the above features, it has also allowed the addition of an extensive selftest routine and computing facilities including manual entry of constants and limits, differencing between pairs of readings or a reading and a keyed-in constant, and percentage deviation measurement.

Further information: circle 226

A special averaging mode gives 10 nanovolts resolution with Datron's Autocal 1071 DVM.



Gould Advance storage oscilloscope has a microelectronic memory.

Digital-storage gives oscilloscope longer lasting and cheaper memory

A digital-storage oscilloscope from Gould Advance Ltd of Hainault stores and displays either the sum or the difference of two input signals. Incoming signal waveforms pass into an analogue-to-digital converter, the speed of which is governed by a time-base control to a maximum of 1 MHz. The digital output is fed into a 1000 × 8-bit memory, said by the manufacturers to be less expensive and to last longer than conventional storage tubes.

The oscilloscope, model OS4100, has a usable sensitivity of 100 microvolt/cm and can be isolated from earth to avoid hum and ground-loop problems. In the T-Y mode, both inputs are viewed as a vertical deflection against the horizontal time axis; in the X-Y mode, one channel deflects the trace horizontally, the other vertically. To view the stored waveform, the information is read out, passed through a digital-to-analogue converter, and the resultant signal displayed by a 100 mm by 80 mm cathode-ray tube which has an illuminated internal graticule.

Internal trigger sensitivity is equivalent to 2 mm of signal at frequencies from dc to 1 MHz, and external sensitivity is better than 100 mV up to 1 MHz. In addition to the main trigger facilities, the unit has a trigger window, said to be the first of its kind, that establishes two trigger levels symmetrically above and below the main trigger level. Whenever a signal crosses the upper threshold in a positive direction, or the lower threshold in a negative direction, the timebase is triggered.

A quarter-scan-length delay can be inserted into the digital signal path by the digital storage system, allowing events that happened before triggering occurred to be viewed on the screen.

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Thermal shock protection for hot glass

A carbon-fibre reinforced, graphite-filled polyimide material has been developed by Johndon Radley of Pudsey, west Yorkshire, to protect hot glass against thermal shock and its weakening effects. Cerberite, as the polyimide composite is called, is available in plate and strip form, in thicknesses up to 30 mm; it can also be cut and profiled to a customer's specifications.

In bottling factories, for example, bottles may suffer a loss in strength because of damage to the hot glass while it is taken off the forming machine on to the conveyor leading to the annealing furnace. Thermal shock is usually caused by contact of metal or other hard and abrading materials with the glass during its transfer.

The composite can be cut to size by a purchaser by normal machining methods, and is safe to handle provided normal dust extraction equipment is used during machining or drilling operations. Employed as a facing on take-out tongs for hot glass, independent-section deadplates, sweep-outs and their guides, and on conveyor guides and transfer wheels, the material is claimed to provide total protection against thermal shock. A further advantage is that its use eliminates the need for heating glass-handling equipment by direct flame. The plastics composite neither abrades nor weakens glass during its most vulnerable stage.

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European community news

UK doubts about hydrocarbon working party expressed

UK doubts about proposals to set up an expert working group to look for projects to explore for hydrocarbons at great depth, which might merit community support, were voiced by energy minister Tony Benn at the 30 October energy council.

In a written commons reply on 7 November, Mr Benn explained that the doubts rested on the fact that hydrocarbon industries were likely to develop economic projects. He said that it was not the government's current intention to put forward projects in the UK, or any areas where the UK regulates exploration, but that the UK was, nevertheless, ready to co-operate in the proposed working party – provided it was made clear that its establishment was not a first step towards the extension of community competence in hydrocarbon resources.

Mr Benn said he had moved an amendment to the proposed terms of reference for the working party but that the council had been unable to agree to his words. The whole question had now been referred back to the committee of permanent representatives (Coreper).

The council had approved a fourth round of projects under the scheme for community projects in the hydrocarbon sector. UK companies should receive 31 per cent of the funds of 39 million European units of accounts (meua) allocated to these projects, Mr Benn said. The council had also approved a resolution taking note of the commission's intention to organise an exchange of information on the problems of siting power stations in a group of representatives nominated by member states.

The council had invited the commission to draw up, in consultation with interested developing countries, inventories of their energy requirements, resources and instruments, and to submit the results of these and other studies to a later meeting of the council. It had been made clear that the commission should not duplicate the work of other international organisations in this field and that its studies should not be confined to countries which had signed the Lomé Convention.

No funds beyond those already programmed would at this stage be made available for this work. In the general discussion of external relations Mr Benn had emphasised that there could be no restrictions on the freedom of member states to engage in their own international energy discussions, and indeed that bilateral contacts by them were to be encouraged.

There had been a general discussion of the community energy situation which showed wide agreement that the main contributions to achieving community objectives in the energy field must come from the national programmes of member states. There was, however, scope for some community action to fill gaps in those programmes, provided it was undertaken in a way which did not undermine the interests of member states. Mr Benn had endorsed this general approach while sounding a warning against any extensions of competence by the commission and emphasising that the development of energy policy was primarily a matter for member governments, co-ordinated through the council.

More community news

Information on European community matters and about member states can often be found in other sections of *Trade and Industry*. For this week's additional news, turn to the following pages:

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Tunnel possibilities examined in study

Possibilities for both tunnel and bridge links across the channel will be included in a community transport infra-structure projects study due to start within the next few weeks. The study was announced by transport commissioner Richard Burke in London on 10 November.

One section of the study will assess the degree of use existing infra-structure receives, and it will look at the value to the community of fixed cross-channel links. One suggestion is for a railway tunnel by the mid 1980s, and if the amount of traffic warrants it, a much larger and costlier road bridge later on. £127,000 will be spent on this section of the study.

£200,000 will be spent on a broad estimate of infra-structure requirements for freight carrying. A model will be set up to simulate demand.

The third part of the study, with a budget of £266,000, will determine the techniques for measuring the impact of infra-structure projects on the community.

Consultation promised on fourth directive

Early next year the Department of Trade will publish a consultative document on the implementation of the EEC fourth directive on the structure and content of company accounts.

The Secretary of State for Trade was asked on 3 November whether UK banks would be exempt from the requirements of this directive. In a written commons reply Stanley Clinton Davis, Parliamentary Under-Secretary of State for Trade, said that the matter was under consideration, and that proposals would be contained in the consultative document.

Water authorities receive loans under framework agreement

Under a new 'framework agreement' with the National Water Council, the European Investment Bank will favourably consider loans for water and sewage schemes within the UK up to a total amount of £210 million.

The first two loans total £22.4 million. The North West Water Authority will receive £14 million for 15 years at 9.9 per cent interest, for various water supply, sewerage and sewage disposal schemes in Merseyside, Warrington, Wigan, Burnley, Hyndburn, Heysham and Lancaster and in the towns of Silloth and Millom.

The Severn Trent Water Authority will be lent £8.4 million for 15 years at 9.9 per cent interest for various water supply, sewerage and drainage works in Nottinghamshire and Derbyshire, principally to serve industrial development in and around the Mansfield/Alfreton growth zone, and for flood prevention works concerning over 20 000 acres of low-lying arable land in North Lincolnshire.

In addition, a loan worth £5 million has been made directly to Grampian Regional Council for 15 years at 9.9 per cent interest to help to finance road improvements and works to develop water supplies and sewerage infra-structure in the Aberdeen area. These have been made necessary by the rapid development of the North Sea oil and gas industry and related activities which have placed pressure on existing facilities. A first loan, also for £5 million, was provided by the EIB for the works in April this year.

The proposed European monetary system

Since its proposal at the 6 to 7 July Bremen European council, the European monetary system (EMS) has been a key issue. To explain the build-up to this initiative by the German chancellor and the French president, we publish a memorandum laid before the house by chancellor Denis Healey on 1 November, giving the background to the scheme.

The snake

The original version of the snake came into effect on 24 April 1972. It established a maximum permitted margin of fluctuation between any two participant currencies of 2¼ per cent. The snake arrangement at the time was conditioned by the agreement at the Smithsonian conference of December 1971 which limited the fluctuation of any currency against its parity or central rate, expressed as a cross-rate against the dollar, to 4½ per cent. The snake thus fluctuated within a wider 'tunnel' against the dollar and was for this reason known as the 'snake-in-the-tunnel'. In March 1973 the link with the dollar was broken – the snake 'left the tunnel'. Since then, the snake currencies and the dollar have floated independently of each other.

The original participants of the snake were Germany, France, Italy and the Benelux countries. The UK, Ireland, Denmark and Norway (as prospective members of the community) joined in May 1972. Norway has remained a member of the snake ever since, although in the event it did not join the community. Denmark left for a brief period in 1972 but has remained in ever since. The UK and Ireland left in June 1972. Italy left in February 1973. Sweden joined in 1973 but left in 1977. France left in January 1974, subsequently rejoined in July 1975 but left again in March 1976. The present members of the snake are therefore Germany, the Benelux countries, Denmark and Norway.

Since withdrawing from the snake, France, Italy and the UK have permitted the exchange rates of their currencies to float independently. The Irish pound has been linked to the pound sterling throughout.

Under the snake system, when any two countries' exchange rates move apart by more than the permitted margin, both countries must intervene on the exchange markets to redress the situation. In order to provide the country at the bottom with the necessary currency to intervene, the country at the top will advance it unlimited very short-term credit, which has, however, to be repaid within 30 days of the end of the month in which the intervention took place. In April 1973 the European monetary co-operation fund (EMCF) was set up to allow these debts to be settled on a multi-lateral basis.

In addition to this unlimited very short-term credit facility, there are also short and medium-term credit facilities in the community. The short-term credit facility currently can provide up to 5.8 billion European units of account (eua) in total, which is available for three months, renewable once. The eua is a 'basket' unit of account made up of an amount of each of the community currencies. Its value in sterling terms is advertised daily in the financial press, and is currently about £0.69. The medium-term facility can provide up to 5.2 billion eua in total for between two and five years. The short-term facility (but not the medium-term) is administered by the EMCF.

Initiative for a new European monetary system

The European council meeting in Bremen on 6 and 7 July discussed a proposal for closer monetary co-operation leading to a zone of monetary stability in Europe, which was introduced by the Chancellor of the Federal Republic of Germany and the President of the French Republic. The council concluded that the creation of such a zone was a highly desirable objective, and considered an outline scheme. The council envisaged a durable and effective scheme. It agreed to instruct finance ministers to formulate the necessary guidelines for the competent community bodies to elaborate by 31 October the provisions necessary for the functioning of such a scheme.

The council further agreed that there would be concurrent studies of the action needed, in the context of such a scheme, to strengthen the economies of the less prosperous member countries, recognising that such measures would be essential if a zone of monetary stability were to be successfully achieved.

The council agreed that in the light of this work decisions could be taken and commitments made at the council meeting on 4 and 5 December.

The government's approach

The Prime Minister set out the government's approach to the discussions in his statement to the house on 10 July 1978. He declared that the government would play its full part in the forthcoming studies. At the same time, he made it clear that a number of heads of government at the European council at Bremen, including himself, had wished to see the details fully worked out before entering into any commitment by their respective governments.

The Prime Minister also made clear that the government had taken the view throughout the discussions that monetary arrangements were not enough by themselves to ensure a zone of monetary stability. He said that any new system had to be one which would last and take full account of the economic as well as monetary interests of each member of the community. He went on to emphasise the importance attached by the government to the studies of the action necessary to ensure a greater convergence in the economies of the member countries. The Prime Minister also referred in this context to the separate question of a review of the common agricultural policy.

Discussions of the proposed new monetary system

The outline scheme considered at Bremen has been discussed in the appropriate community committees and at the July, September and October meetings of the finance council, when the Chancellor of the Exchequer represented the UK.

These discussions have not yet produced definitive proposals for a scheme. There will be a further meeting of the finance council on 20 November, and the subject will be on the agenda of the European council on 4 and 5 December.

Certain elements of the proposals likely to emerge from the current discussions are clear. The aim of the scheme would be significantly to reduce the fluctuations between the exchange rates of the currencies of participating countries. To this end, the authorities in each of the participating countries would intervene in the exchange markets in order to maintain the parities of their currencies within agreed margins of fluctuation (yet to be determined).

It is likely that these margins will be measured from a parity rate of each currency against each other currency in the system, giving rise to a grid of upper and lower cross rates. This is the basis on which the snake works. In addition each currency will have a parity rate and agreed margins of fluctuations against a new monetary unit, the European currency unit (ecu), which could have the same definition as the eua.

A currency which had diverged significantly from the weighted average of the other community currencies (represented by the ecu) would be likely to exceed its margins of fluctuation against the ecu before it reached its permitted margin within the grid of cross-rates.

Three different possibilities could arise when this happened, and there is as yet no agreement on which of the three will apply:

1. the indication of divergence would serve as a trigger for consultations between the participants, but without any obligation on the country of the divergent currency to take any action;
2. the indication of divergence would lead to consultations, but with an obligation in principle on the country of the divergent currency to take some form of action to check the divergent trend, unless it could give reasons for failing to do so;
3. the country of the divergent currency would be obliged to intervene. Furthermore, in addition to undertaking economic policy consultations the country would not, for the time being, be able to demand payment of intervention debts due to it where the intervention was caused by its own divergence.

European monetary fund

The suggestion was put forward in the outline

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scheme considered at Bremen that a European monetary fund (EMF) should be established to take the place of the EMCF, and to absorb the existing credit facilities in the community.

For legal and practical reasons it was not envisaged that this would take place until two years after the start of the EMS. If the EMF were to be established along the lines considered at Bremen it would make available credit of about 25 billion eua, by issuing ecus against deposits of national currencies. Discussions have therefore been proceeding on the possibility of increasing to that figure the amount of credit available in the community during the interim period before the EMF is operational.

A difference of view has arisen between some countries who argue that the 25 billion eua should represent the sum of what each country could be required to advance, and others who maintain that the 25 billion eua should represent the maximum effectively available to debtors. (The difference arises because any country which was a debtor in the system could not at the same time be a creditor). The maximum effectively available under the first arrangement described above could amount to only 16 billion eua. The maximum effectively available under existing credit facilities is about 11 billion eua.

It is likely that settlement of debts incurred as a result of intervention will be carried out in ecus. Each central bank would obtain its initial supply of ecus in return for the deposit with the EMCF or EMF of 20 per cent of its reserves. This could give rise to an initial supply of ecus equivalent to about 25 billion eua, but would not represent any additional resources for the members of the EMS since the ecus would have the same value as the reserves deposited. The implications of these arrangements for settlement have yet to be fully explored.

Provision for changing exchange rates

It is likely to be proposed that the system, while aimed at reducing the necessity for frequent changes in exchange rates, should nevertheless provide for arrangements for adjusting exchange rates by mutual agreement. It may also be proposed that, in certain exceptional circumstances of an essentially temporary nature, a country could take temporary 'leave of absence' from the system: but some countries are not persuaded of the need for formal provision for this, and think that such provision might harm the credibility of the system.

Association of non-EEC countries

The outline scheme considered at Bremen stated that non-member countries with particularly strong economic and financial ties with the community might become associate members of the system.

The concurrent studies

The concurrent studies of the action needed to strengthen the economies of the less prosperous member states cover the whole range of community policies, including the operation of the community budget. The results of these studies will be submitted to the finance council, and to the European council on 4 and 5 December.

Timetable

It has been suggested that if the European council on 4 and 5 December concluded that the proposed new European monetary system should be adopted, the necessary arrangements should be made to permit the system to start operation on 1 January 1979.

Legislative implications

Until the details of the proposal are clearer, it is uncertain what legal arrangements would be necessary to implement it. The government will fully inform the house, as necessary, on what arrangements would appear to be required.

New legislation

The legislation listed below has been published in the *Official Journal of the European Communities* as indicated against each item. The *Official Journal* is published in English and copies should be obtained from HMSO. Information about the items listed, is so far as other member states' requirements are concerned, is available to British exporters from Department of Trade, Export Services and Promotions Division, Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757 ext. 7174/482/408.

Common agricultural policy

The texts of the following regulations which affect the various agricultural sectors in the EEC have been published in the *Official Journal of the European Communities*.

Sugar. Regulation (EEC) 2377/78 amending regulation (EEC) 1998/78 laying down detailed rules for the offsetting of storage costs for sugar. (*Official Journal* L 287, 13 October 1978).

Corrigenda. The *Official Journal* L 296, 21 October 1978, contains the following correction to:

Regulation (EEC) 705/78 of 4 April 1978 amending regulation (EEC) 3330/74 on the common organisation of the market in sugar published in the *Official Journal of the European Communities* L 94, 8 April 1978.

Page 3:

Subheading 29.16 A ex VIII, Other: the indent should read as follows:

'Glyceric acid, glycolic acid, saccharic acid, isosaccharic acid, heptasaccharic acid, their salts and esters'

Subheading 29.35 ex Q: Other: the indent should be replaced by the following:

'Intermediate products from the chemical transformation of penicillin into antibiotics falling within subheading 29.44 A or C'

Milk and milk products. Regulation (EEC) 2496/78 on detailed rules for the granting of private storage aid for Provolone cheese (*Official Journal* L 300, 27 October 1978).

Regulation (EEC) 2574/78 on the granting of additional aid for the consumption of butter in the United Kingdom (*Official Journal* L 309, 1 November 1978).

Wine. Regulation (EEC) 2483/78 amending annex 1 to regulation (EEC) 2788/77 fixing the free-at-frontier reference prices applicable to wine imports from 16 December 1977 (*Official Journal* L 299, 26 October 1978).

Seeds. Regulation (EEC) 2514/78 on the registration in the member states of contracts for seed multiplication in non-member countries (*Official Journal* L 301, 28 October 1978).

Cereals and rice. Regulation (EEC) 2524/78 amending annex II to regulation (EEC) 2042/75 on special detailed rules for the application of the system of import and export licences for cereals and rice (*Official Journal* L 301, 28 October 1978).

Animal feedingstuffs. Regulation (EEC) 2525/78 amending regulation (EEC) 1528/78 laying down detailed rules for the application of the system of aid for dried fodder (*Official Journal* L 301, 28 October 1978).

Oils, fats and oilseeds. Regulation (EEC) 2580/78 extending the 1977-78 marketing year for oilive oil, providing for special measures for this sector, and amending regulation (EEC) 878/77 as regards the exchange rates to be applied in agriculture (*Official Journal* L 309, 1 November 1978).

Accessions to the ACP/EEC Convention of Lomé

The *Official Journal of the European Communities* L 271, 27 September 1978 contains the text of regulation (EEC) 2236/78 concerning the conclusion of the agreements on the accession of Cape Verdi, Papua, New Guinea and Sao Tomé and Principé to the Convention of Lomé and of the relevant agreements. The agreements and the Protocols annexed thereto entered into force on 1 November 1978. Since, pending ratification of these agreements, the Community applied autonomously the trade provisions of the Convention of Lomé there is no resulting change in the trade arrangements for these countries. Copies of the *Official Journal* L 271 may be obtained from HMSO price 60p plus postage.

Further information: Department of Trade, Commercial Relations and Export Division, 1 Victoria Street, London SW1H 0ET tel. 01-215 5106.

Harmonisation of legislation

Food Standards. The *Official Journal of the European Communities* L291, 17 October 1978 contains the text of directive 78/842/EEC amending for the sixth time directive 73/241/EEC on the approximation of the laws of the member states relating to cocoa and chocolate products intended for human consumption.

Further information: Ministry of Agriculture, Fisheries and Food, Food Standards Division, Great Westminster House, Horseferry Road, London SW1P 2AE, tel 01-216 6438.

Corrigenda. The *Official Journal* L 296, 21 October 1978 contains the following correction to:

Directive 78/663/EEC of 25 July 1978 laying down specific criteria of purity for emulsifiers, stabilisers, thickeners and gelling agents for use in foodstuffs published in the (*Official Journal of the European Communities* No L 223 of 14 August 1978)

Page 28:

E 477 – Propane-1,2-diol esters of fatty acids

Dimer and trimer of propane-1, 2-diol

for: 'not more than 0.4 per cent',

read: 'not more than 4 per cent'.

Prepackaging. The *Official Journal of the European Communities* L 311, 4 November 1978 contains the text of directive 78/891/EEC adapting to technical progress the annexes to directive 75/106/EEC and 76/211/EEC on prepackaging. Further information: Department of Prices and Consumer Protection, Metrology, Quality Assurance and Standards Division, Abell House, John Islip Street, London SW1P 4LN. Tel 01-211 3895.

Imports from non-member states

The Official Journal of the European Communities L 299, 26 October 1978, contains the texts of the following decisions which authorise the relevant member states to refuse entry to the specific goods.

Decision 78/872/EEC authorizing France not to apply community treatment to gloves, mittens and mitts, knitted or crocheted, not elastic or rubberised, falling within heading 60.02 of the common customs tariff, originating in the People's Republic of China and in free circulation in the other member states.

Decision 78/873/EEC authorising Italy not to apply community treatment to yarn of discontinuous or waste synthetic fibres not put up for retail sale, falling within subheading ex 56.05 A of the common customs tariff (Nimexe codes 56.05-03, 05, 07, 09, 11, 13, 15, 19, 21, 23, 25, 28, 32, 34, 36, 38, 39, 42, 44, 45, 46, 47), originating in Romania and in free circulation in the other member states.

Decision 78/876/EEC authorizing France not to apply community treatment to woven fabrics of man-made fibres (discontinuous or waste), falling within the subheading ex 56.07 B of the common customs tariff, originating in the People's Republic of China and in free circulation in the other member states.

Decision 78/879/EEC authorising Italy not to apply community treatment to cotton yarn, not put up for retail sale, falling within heading 55.05 of the common customs tariff (Nimexe codes 55.05-13, 19, 21, 25, 27, 29, 33, 35, 37, 41, 45, 46, 48, 52, 58, 61, 65, 67, 69, 72, 78, 92, 98), originating in Argentina and in free circulation in the other member states

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Overseas trade news

Enormous potential for British business in Mexico – Chalfont

There is an enormous potential for British business in Mexico, despite the investment regulations which limits foreign firms to minority holdings, said Lord Chalfont immediately before the opening of the British industrial exhibition in Mexico on 8 November. Lord Chalfont is president of the trade advisory group for Latin America and president of the exhibition.

The Mexican investment laws did present problems for British investors Lord Chalfont said, but the need for them was understood and it was felt that there was room for investment within them.

The activity of President Lopez Portillo was impressive and provided the present political stability continued Lord Chalfont said he saw no reason why Mexico should not achieve its ambitious development programme. Bankers in the City of London had great confidence in the stability of Mexico.

Also at the opening, Dr. Jose Andres De Oteyza, Mexican Minister for National Resources and Industrial Development said that Mexico was certain that the exhibition would be a step forward in the close ties of friendship, and would continue to bring the two countries together and 're-establish the mutual respect we have always had for each other'. He said that to support its economic priorities Mexico had to develop its capital goods and equipment areas – as well as those of technology and finance. The exhibition was particularly relevant to these needs.

On the opening day of the British industrial exhibition in Mexico City ABMTM Ltd (formerly the Association of British Machine Tool Manufacturers) finalised a contract worth £1.5 million for two roll-on roll-off ferry boats to be built in Mexico on a joint-venture basis.

The 60 m long vessels, which are being built for the Mexican Toll Roads and Bridges Department, will be used on the Yucatan to serve two islands and should be completed early in 1980.

Under the contract, which was signed on ABMTM's stand at the exhibition, by John Halbert, the chairman and managing director, and Hector Calderon, director-general of the Toll Roads and Bridges Department, ABMTM will be the designers and project managers. They will also supply the engines, electrical equipment, stern gear and other machinery, and will supervise construction together with Lloyd's Register of Shipping.

The exhibition, which was jointly opened by the President of Mexico, President Jose Lopez Portillo and the Duke of Kent, vice-chairman of the British Overseas Trade Board, was Britain's biggest overseas trade promotion in 1978.

Sponsored by the British Overseas Trade Board, the exhibition featured a total of 210 companies and organisations covering a wide range of industrial, technological, organisational and service industrial, particularly in the areas of machine tools, petroleum, petrochemicals, chemicals and general, especially transportation equipment and scientific and electronic equipment.

The Mexican government is co-operating in the staging of the event and is showing a special interest in developing Anglo-Mexican manufacturing operations such as joint ventures and manufacturing under licence. Several companies who will be participating are already involved in such partnership arrangements including ICI, International Computers and Rolls-Royce. Over 60 British companies have established themselves locally in this way and it is hoped that the exhibition will lead to even greater British involvement in Mexico in the future.

. . . and line of credit backed by ECGD

The repayment and funding of a $20 million line of credit, which Barclays Bank International has made available to Nacional Financiera SA for initial use at the British industrial exhibition which closes today (17 November), is being backed by the Export Credit Guarantee Department.

British exporters who displayed equipment at the exhibition will be able to obtain finance from this line of credit.

The loan is to enable buyers in Mexico to place orders in the UK for capital goods and associated services. UK suppliers will receive 85 per cent of the contract value from the loan; the remaining 15 per cent is payable from the buyer's own resources. To qualify under the terms of the loan a contract must have a minimum value of US $200,000 and be placed by 8 November 1979.

Rewards high for making EEC work – Catherwood

There are great rewards for making the European community work said Sir Frederick Catherwood, chairman of the British Overseas Trade Board, speaking at a rotary international conference in Blackpool on 11 November.

With 250 million people, the community was bigger than either the United States or the Soviet Union and associated countries in Europe, including the potential new members, made up another 100 million, he said. There was no grouping in a world of 4000 million which carried equal weight, so the rewards for making the community work were high.

Sir Frederick continued: 'Already in trade there is all the difference in the world between the weight of a case put by an individual member of the community and the weight carried by the whole community'.

'Our greatest danger', he said, 'is that we shall fail just when we could succeed, because of an absence of vision and of the determination which comes of the vision. If we see clearly where we are going, we shall be able to get there.'

Britain signs health agreement with Hungary

Britons taken ill while on business trips or on holiday in Hungary will be able to get urgent medical treatment free of charge under a reciprocal health agreement signed in Budapest on 1 November by Roland Moyle, Minister of State for Health, and the Hungarian Health Minister, Dr Schultheisz.

The agreement will benefit about 8000 British visitors to Hungary every year and comes into force after ratification in a few weeks. Until now they have either had to pay for treatment or take out medical insurance.

Under the British 'good samaritan' policy, Hungarians visiting Britain – there are about 12 000 each year – receive urgent medical treatment free under the NHS.

The agreement signed by the two health ministers also provides for medical co-operation between the two countries. Discussions will take place between officials of the two countries on the detailed proposals which will be set out in a plan of co-operation to be signed in Britain next year.

Hints to business men booklets

A revised edition of the booklet on Australia has been issued. British exporters can order this booklet by post, accompanied by the appropriate remittance, from the Department of Trade, Publications Sales Unit, Export House, 50 Ludgate Hill, London EC4M 7HU, at £1 per copy, plus postage and packing as follows. 1 copy 20p, 2-4 copies 30p, 5-7 copies 40p, more than 7 post free.

Copies may also be purchased by personal callers at Export House and at the offices of the Department of Industry at Newcastle upon Tyne, Cockermouth, Manchester, Leeds, Nottingham, Birmingham, Bristol; from the Scottish and Welsh Offices and from the Department of Commerce Belfast.

Seminar: South Korea into the 1980s

The Korea trade advisory group are holding a half-day seminar, entitled 'South Korea into the 1980s: A new and major industrial economy', on Friday, 1 December.

Speakers will be Mr D. C. Kim, president, Daewoo Industrial Co Ltd (one of Korea's largest industrial conglomerates) who will talk on 'Future industrial and economic growth in the Republic of Korea'; Sir John Buckley, chairman, Davy International; Nicholas Wolfers, assistant director, Samuel Montagu and a member of the UK-Korea economic co-operation group and Richard Tallboys, counsellor commercial, British embassy, Seoul, who will talk on 'Present and future opportunities in South Korea for British industry'.

The seminar will be chaired by Geoffrey Nicholas, chairman of the Korea trade advisory group, and will be held at the lecture theatre, Fortress House, 23 Savile Row London W1 (entrance in New Burlington Mews), starting at 9.30 for 9.45 am and ending at 12 noon.

There is no charge but as space is limited Tim Norman at the Department of Trade, Room 316, 1 Victoria Street, London W1, tel. 01-215 5642 would appreciate knowing names and addresses in advance.

Dakar fair: hotel rooms full

Hotel accommodation in Dakar, Senegal will be almost impossible to obtain between 28 November and 10 December because of the heavy attendance expected at the third international trade fair and investors forum.

Business visitors are therefore advised not to arrive between these dates unless they have a confirmed hotel booking.

Notices to importers

Issued by the Department of Trade, Import Licensing Branch, Charles House, 375 Kensington High Street, London W14 8QH. Telephone inquiries should be addressed to the number at the end of the notice.

1714: documentary proof of origin for textile and clothing imports from Turkey

Imports from Turkey were temporarily excluded from the proof-of-origin requirements announced in notices to importers 1678 and 1681 published in *Trade and Industry* on 28 April and 19 May 1978. Documentary proof of origin, in the form set out below, will now need to be produced at the time of importation for all commercial imports of the textile and clothing items listed in groups I to VI in notice 1681 which are consigned from Turkey to the UK on or after 1 November 1978 and are imported into the UK on or after 1 January 1979.

For goods for which an individual import licence is required, both the licence and the documentary proof of origin, in the required form, will need to be produced when the goods are entered.

Required form

For goods which are of Turkish origin, according to the origin rules set out in regulation (EEC) 749/78 (published in the *Official Journal* L101, 14 April), the movement certificate A.TR1 or A.TR3 covering the consignment must be endorsed with the words 'Turkish origin' in English or one of the other community languages (or in Turkish, eg 'Türk menşeli') in the 'Remarks' space on the form and this endorsement validated by the stamp and signature of the issuing Turkish authority.

For goods which are not of Turkish origin, a separate certificate of origin issued by a chamber of commerce or other authorised body in Turkey certifying the country of origin of the goods or a similar certificate issued in the country of origin of the goods, will be required. A movement certificate A.TR1 or A.TR3 (*not* endorsed as indicated above) will also be required in the normal way where preferential tariff treatment is claimed. Certificates of origin issued in Turkey for goods not of Turkish origin will not be accepted if similar goods of Turkish origin are subject to quota restrictions on importation into the UK.

Note

It is up to UK importers to obtain the documentary proof of origin in the required form from their Turkish suppliers for each consignment and produce it to HM Customs at the time the goods are entered. In most cases the Turkish suppliers will already be aware of the requirements, having been informed of them by the Turkish authorities.

Importers may find that their Turkish suppliers may provide endorsed A.TR1 or A.TR3 movement certificates or certificates of origin for some goods for which proof of origin is *not* required. This is of no consequence; the endorsed A.TR1 or A.TR3 movement certificates can be presented in the normal way for the purpose of claiming preferential tariff treatment.

Inquiries

General and rules of origin: Department of Trade, General Division 2C, tel. 01-215 5750 or 5545.

Customs procedures: local Customs offices or General Customs Directorate, tel. 01-928 0533 ext. 501.

1715: imports of certain textiles from Malta

As already announced, the EEC has imposed restrictions on imports into the UK of certain goods originating in Malta. The goods affected are as follows:

Category/tariff heading/ description of goods	Units	1978 quota
1/55.05 Cotton yarn, not put up for retail sale	tonnes	274
2/55.09 Other woven fabrics of cotton		NA
4/ex 60.04 Knitted or crocheted under garments, *other than babies' garments*, the following: T-shirts and lightweight fine knit roll, polo or turtle-necked jumpers and pullovers, of cotton or of man-made textile fibres; shirts of cotton or of synthetic textile fibres; undervests and the like of cotton or of synthetic textile fibres	thousand pieces	365
6/ex 61.01 Men's and boys' woven trousers, breeches and shorts, of cotton, of man-made textile fibres, of wool or of fine animal hair, *other than garments of fabric of heading no. 59.08, 59.11 or 59.12*		NA
6/ex 61.02 Women's, girls' and infants' (*other than babies'*) trousers and slacks, of cotton, of man-made textile fibres, of wool or of fine animal hair, *other than garments of fabric of heading 59.08, 59.11 or 59.12*		NA
7/ex 60.05, ex 61.02 Women's, girls' and infants' (*other than babies'*) blouses and shirt-blouses, of cotton, of man-made textile fibres, of wool or of fine animal hair	thousand pieces	304
8/ex 61.03 Men's and boys' shirts of cotton, of man-made textile fibres, of wool or of fine animal hair		NA

Imports of these goods originating in Malta were already the subject of surveillance licensing. Outstanding licences issued under those arrangements in respect of these newly restricted goods were revoked with effect from 11 November 1978.

Goods in transit

Goods in transit to the UK on or before 10 November will be licensed. Traders should apply as soon as possible, and not later than 1 December 1978, for such goods, submitting to Import Licensing Branch documentary evidence (ie bill of lading or airway bill) of the date of the shipment of the goods in support of a completed form ILB/A.

No further imports of categories 2, 6 and 8 originating in Malta and intended for home consumption will be permitted in 1978. Traders who are already committed to orders placed before the imposition of restrictions may therefore wish to consider diverting such goods to other markets willing to take them.

Quotas have been established for categories 1, 4 and 7 but all goods imported from Malta since 1 January 1978 will count against the quota, and in view of the volume of goods already imported this year, and of those likely to have been in transit when the new restriction was announced, it is unlikely that there will be any quota remaining for use this year.

Imports for re-export

The general import licensing arrangements for restricted textiles re-exported from the UK are set out in NTI 1441.

Inquiries: Import Licensing Branch, tel. 01-603 4644 ext. 367.

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Trade with China grows

Business between the UK and China is booming. Figures for exports to China from January to September this year total £62 million – equal to the total cumulative value for the whole of 1977. And just three orders for mining equipment signed this year will be worth £93 million.

It's not only on the trade front that relations with China are improving. In the last 12 months three British cabinet ministers have visited China and six Chinese ministers have been to this country. David Ennals, health and social security secretary, went to China in May, education secretary Shirley Williams in July, and former trade secretary Edmund Dell in August.

The Chinese have been represented by Li Chiang, foreign trade minister, in November last year, Ku Ming, vice minister of the state planning committee, in May, Tang Ke, metallurgy minister, also in May, Hsian Nan, vice minister for machine building, in June, foreign affairs minister Huang Hua in October, and vice-premier Wang Chen, who pletes his visit today.

Edmund Dell pointed out on his return from China that there had been a fundamental shift in Chinese policy, and that the present leadership knew it needed a significant element of foreign co-operation if it was to raise, sufficiently rapidly, the living standards of the Chinese people.

Opportunities for trade existed in the 120 projects outlined by chairman Hua Kuo-Feng in the 10-year economic plan announced at the fifth national people's congress in March this year, he said. These projects are in the fields of iron and steel, coal mining, oil and gas, power stations, railways and harbours. This indicated, he said, the potential business British industry was now chasing in China.

We look here at contracts UK firms have been winning, and see how the British Steel Corporation set to work on an engineering study for the Chinese. We also look at the visit of vice-premier Wang Chen.

Vice-premier Wang Chen, being greeted at Heathrow by industry secretary Eric Varley. Commercial visits made by the Chinese party were arranged by the British Overseas Trade Board's Overseas Visitors Bureau.

Chinese vice-premier signs science agreement

Vice-premier of China Wang Chen completed his 11-day visit to Britain today. During the visit he signed a science and technology agreement (see next week's issue). Secretary of State for Foreign and Commonwealth Affairs, David Owen, and minister of state for industry Gerald Kaufman, signed on behalf of this country. Vice-premier Weng is one of 13 Chinese vice-premiers and has overall responsibility for a number of industry ministries, including those concerned with the aircraft industry, shipbuilding and offshore oil.

During the visit, which lasted from 6 to 17 November, the vice-premier met Prime Minister Jim Callaghan, chancellor Denis Healey, foreign secretary David Owen, former trade secretary Edmund Dell, energy secretary Tony Benn, and industry secretary Eric Varley with senior industrialists John Buckley, chairman of Davy International Group, Sir Derek Ezra, chairman, National Coal Board, Sir Peter Matthews, chief executive, Vickers Ltd, and Sir Arthur Knight, chairman, Courtaulds. He also met the leader of the opposition Margaret Thatcher.

The Chinese party also visited British Aerospace, Rolls-Royce, the Central Electricity Generating Board, British Shipbuilders in Newcastle, International Computers Ltd, Austin and Pickersgill Shipyard in Sunderland, met and representatives of the Offshore Supplies Office.

The vice-premier was accompanied by Hsiung Hsiang-hui, adviser to vice-premier Wang Chen and vice-president of the Chinese People's Institute for Foreign Affairs, Tuan Yun, vice-minister of the State Planning Commission, Liu Hua-ching vice-minister of the State Science and Technology Committee, Sun Yueh, director of the Office of the State Council, Chang Yi-chun, deputy director, West European Department, Foreign Ministry, Hu Han-chuan, adviser of the Science and Technology Committee of the Fourth Ministry of Machine-Building, Wang Kung-heng, deputy director of the Science and Technology Committee of the Sixth Ministry of Machine-Building.

The visit took place just prior to the opening in Peking of the first exclusively all-British scientific instruments exhibition, organised by the British Overseas Trade Board with the assistance of the Scientific Instruments Manufacturers' Association. The exhibition is scheduled for 14 to 25 November, with 42 British companies showing their products.

Planning is well under way for a first-ever all-British energy exhibition, sponsored by the BOTB, and organised by Industrial and Trade Fairs Ltd. Some 60 companies active in this broad field have applied to exhibit in the event which will run from 5 to 15 June 1979. Proposals for several other exhibitions are being discussed with the Chinese authorities.

China changes attitude towards finance

In anticipation of the increased volume of trade with China, attention has been focussed upon the development of suitable financing arrangements. Here a major new factor – and one which has stimulated a great deal of activity in government and banking circles in both London and Peking – has been the changed attitude of the Chinese authorities to credit.

Until recently China had been unwilling, for various reasons, to accept credit as a means of financing international trade. Indeed, UK trade with China continues to be transacted on cash or 'deferred payment' terms. However, during former trade secretary Edmund Dell's visit to Peking last summer, it became clear that the Chinese government had changed its attitude significantly. It is now prepared to accept credit from western banking sources and in talks with Mr Dell and his officials the Chinese indicated their willingness to react with flexibility to any proposals that might be made in this respect.

As a result, in recent weeks a number of UK banks have been in touch with the Bank of China and with the Export Credits Guarantee Department. In turn, ECGD has had meetings with the Bank of China to devise a form of documentation appropriate to the needs of the market, where ECGD's traditional function of guaranteeing bank finance for major projects and capital goods exports are concerned. In these meetings the initial discussions have been concentrating upon producing a fairly simple form of documentation based upon inter-bank deposits – similar in many ways to a line of credit – designed to accommodate medium-sized contracts of $5 million or more. These negotiations are continuing with a view to producing further documentation for use with major project business.

Contracts round-up

Business with China has taken off in recent months. Below are just some of the UK firms which have either signed contracts with the Chinese or are currently negotiating with them.

Dowty

The mining division of Dowty Group won a £70 million order in September for coal mining equipment. The contract is for the supply of 15 coal-face sets of the latest type of chock-shield powered roof supports, equipped with Dowty Dowval hydraulic control systems; 31 heavy duty armoured face conveyors; and 78 belt conveyors. Negotiations in Peking between the Dowty sales team and the China National Technical Import Corporation took 10 months.

Delivery of roof support equipment from Dowty Mining Equipment factories near Tewkesbury, Dowty Hucknall's factory near Nottingham, and conveyors from Dowty Meco at Worcester, will start in January 1979 and is scheduled to be completed by October 1979. Deliveries of conveyors from Worcester factories will continue until March 1980.

Gullick Dobson International, Wigan

Won a contract worth more than £10 million for the supply of six longwall roof support installations in September. The supports chosen by the Chinese include the latest advanced designs in thin seam heavy duty supports and in shield technology for highly inclined seams. The company won its first Chinese order in 1973. Delivery is scheduled for mid-1979. Gullick Dobson's chairman Tom Pollard says that prospects for continuing business after that remain excellent.

Davy Powergas

Won contracts worth £38 million from the China National Technical Import Corporation in September – believed by Davy to be the largest order for chemical plant ever placed with a British company by China. The contracts cover the design and supply of two large oxo-alcohol plants, each of 70 000 tonnes capacity per year. Oxo-alcohols are further processed into plasticisers for use in the manufacture of flexible PVC, in addition to finding wide use of solvents.

Negotiations were carried out in Peking by a seven-man Davy team and were completed after three months of discussions.

Davy will carry out the process and detailed engineering for both oxo-alcohol plants, supplying equipment and supervision during both the construction and commissioning of the plants. The plants will use the new low pressure oxo process, developed by the company with Union Carbide Corporation and Johnson Matthey and Co Ltd.

Davy already has a DM 30 million contract in China, for a 40 000 tonnes per year polyester plant taken by Davy's German subsidiary, Zimmer AG of Frankfurt/Main. Discussions are now in progress for a second and much larger polyester plant. Davy is also involved in discussions concerning the supply of three more plants to China.

The Chinese delegation meets former trade secretary Edmund Dell for talks.

Dunbee-Combex-Marx
Announced a £25 million 10-year trading agreement on 25 October. The deal agreed between DCM (the Hornby-Pedigree-Scalextric toy group), and the China National Light Industrial Products Corporation of Shanghai, provides for the sale by DCM of equipment, including moulds and machinery, available for release from its existing plants. The overall agreement provides that sales will be to a minimum annual value of £1,250,000 within the ten-year period totalling £25 million, subject to individual contracts.
Individual transactions within the overall agreement will be paid for 50 per cent in cash and 50 per cent in toys made principally from DCM moulds. Provision is made for stage payments of the cash element.
Under the terms of the deal the Chinese have agreed to buy toy manufacturing equipment and materials exclusively from DCM in the UK. Similarly DCM has exclusivity in the UK for 10 years and USA for three years, and in Eire, Belgium and the Netherlands, for distribution of toys made in China from DCM equipment. The company is also free to sell such goods anywhere else in the world. The deal also includes a technical services agreement which covers the provision by DCM of technology and expertise to be paid for at cost.

Anderson Strathclyde Ltd
Will supply mining equipment to the China National Technical Import Corporation, consisting of coal cutting machines and face conveyors. The value of the contract is approximately £13 million and delivery will be made during 1979 and early 1980.
Contact has been maintained with China since equipment to the value of £3.5 million was supplied in 1974-75. Regular visits by top management have taken place during the intervening period and there have been concentrated negotiations over the last six months. The company believes that the successful negotiation of this contract is a further step in the development of a long-term market for British mining equipment in the People's Republic of China.

Lloyd's Register
Chairman of Lloyd's Register Robert Huskinsson, left London on 13 November for business talks in Peking at the invitation of the Register of Shipping of the People's Republic of China. He was accompanied by Donald Rennie, Lloyd's Register's chief representative and senior principal surveyor for the orient. Mr Huskisson hopes to consolidate the links forged as a result of the Agreement of Mutual Co-operation signed earlier this year between the Register of Shipping of the People's Republic of China and Lloyd's Register.
The Chinese Register of Shipping has expressed great interest in Lloyd's Register's computerised ship design and plan appraisal systems and the new techniques used for surveying ships and administering classification surveys. Full details will be provided, together with a copy of the latest edition of LR's Rules for Steel Ships.

Electricity supply industry mission
A mission will leave later in November, headed by chairman of the Electricity Council, Sir Francis Tombs. The team will discuss a number of aspects of electricity supply, including energy policy, super high-tension transmission technology, automation of electricity systems and methods of supplying large cities, management and computer applications, the use of pulverised fuel ash, and research.

Standard Telephones and Cables
A team of eight flew out on 5 November to give a series of lectures, covering the TXE4A electronic telephone exchange, which forms the basis of the British Post Office's modernisation programme, and high capacity telephone trunk systems. These will include systems using digital techniques, and optical fibre cables. There will also be lectures on special cables for hydrospace applications and on time-sharing transmission systems which increase the number of simultaneous conversations the route can carry.

Vice-premier Yu Chiu-li attending the opening ceremony of the international agricultural exhibition in Peking, 20 October to 3 November. He is seen here inspecting precision speed drill on Hestair Farm Equipment stand. Eighteen companies exhibited in a British pavilion organised by the British Overseas Trade Board. British equipment and products relevant to China's agricultural development were on show, including tractors, irrigation equipment, spraying machines, hydraulic equipment, cultivators, sugar beet harvesters, shearing and clipping equipment, fertilisers, insecticides and vaccines.

Work begins on steel engineering study

British Steel Corporation and Davy International are to carry out an engineering study for the Chinese at one of their steelworks. Marianne Semadeni spoke to BSC Overseas Service' managing director Michael Edwards about the deal.

British Steel Corporation (Overseas Services) Ltd and Davy International came back from China in October with a contract for an engineering study for the modernisation and expansion of the Shoutu steel works in the Peking suburbs.
The contract was signed on 9 October, and work started the very next day. BSC Overseas Services' managing director Mr J. M. Edwards estimates that, at its peak, 70 to 100 people will be working on the report, with 15 already out in China. The study should be completed by the end of the year, and although its value in money terms is relatively low, BSC and Davy expect it to lead to further work. Indeed, the corporation hopes to receive shortly further invitations for the provision of services and Davy International opportunities for the supply of plant.
The Chinese steel sector is of particular interest to the UK because China has very large plans for its steel industry which will involve large-scale modernisation as well as the construction of new plants – and modernisation, through an historical accident, is an area in which the British have had great experience.
The Chinese have operated a steel industry for a very long time, and are capable of running rather old plants very efficiently. They are expecting this year to produce something in the order of 30 million tonnes, and are

planning to double this by 1985.
By the end of the century they aim to double this again to produce 120 million tonnes annually. A rate of expansion that is tremendous, but possible, Mr Edwards believes. 'In fact their target is more or less in line with what the Japanese achieved'.
'The UK now has very modern, large-sized iron and steel making and processing units coming into operation, and they are almost invariably established in existing works. The Chinese are planning to build some entirely new works to which our new plant units are very relevant. They also have much more to be done on well-established works which fell behind when China was isolated from the outside world. The Chinese seem to be impressed with what they've seen in this country.
'Our experience in modernising plants is greater than that of other countries because we've had to go through this stage of catching up on investment; but, for example, the Japanese built a brand new industry from scratch and therefore haven't our experience in this field.'
The UK is also planning to increase, quite sharply, sales of finished steel to China – especially while China is building up its own capacity. Indeed, China should be a long-term market for finished steel, because, with a population of around 1000 million, even this new spate of development is not going to saturate the market.
One other point in favour of UK penetration of the Chinese market is that China is now standardising on equipment sizes which correspond to the latest British equipment such as blast furnaces and steel-making units. So when the Chinese visit UK plants they are able to see working examples of precisely the equipment they want themselves.
There is much scope for large companies to collaborate in dealing with China. BSC is working closely with Davy International and GEC. The Chinese are interested in engineering design, contracting, the manufacture and supply of equipment and the training of personnel.
Credit is a very important question now the Chinese are coming right out into the commercial world.

'The Chinese market, although it is vast, is highly competitive. The ability to provide the right financial packages to meet Chinese requirements will be a major factor – and Britain can do it better than anyone.'

'During the 1980s the Chinese are aiming to become major exporters, principally of oil, minerals and other raw materials, and expect to generate sufficient earnings in the 1980s to service the very large loans they will have to take on now to pay for their industrial expansion.
'Having taken the decision to borrow to finance the import of capital equipment the Chinese are now very flexible, very well-informed and are going to borrow on the best terms possible a lot of money for big projects. I have told them, with the backing of Whitehall and the City of London, that the sort of money they need is available, and we're talking in terms of billions of dollars for a single project. The Chinese are very credit-worthy and they don't incur debts unless they can see their way clear to paying interests and repayments.
'This is very important, because the Chinese market, although it is vast, is highly competitive. The ability to provide the right financial packages to meet Chinese requirements will be a major factor – and Britain can do it better than anyone.
What then are the next steps for BSC and Davy?
'There are lots of things going on. Exchanges of visits are taking place in relation to the major new steel works in East Hopei; Chinese experts are coming to look in detail at British plant-making capability and to see examples of new plant in operation, and we have been invited in return to look at the Chinese capability to manufacture some equipment.
'Two expert teams are currently in China, one working at the Shoutu works at Peking and the other giving help at another existing works. A strong team will shortly by visiting a third existing works, following an initial visit in September, to make proposals for a major development programme.
'There's a possibility early next year of discussion about a fourth works.
'All these are joint BSC-Davy operations, with other British companies giving specialist support. The scene is very active with several projects being pursued separately but by a totally co-ordinated BSC-Davy team.'

Vice-premier Wang pictured with former trade secretary Edmund Dell.

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A shop window for British goods

A British colony, with excellent commercial, financial and communication links with Japan, China and south-east Asia, Hong Kong is a shop window for British goods on a prime site. Senior British trade commissioner in Hong Kong, Derek March, explains why Hong Kong offers an opportunity not to be missed.

Twenty years ago Hong Kong's imports were worth under 4,500 million Hong Kong dollars. In 1977, they topped 48,000 million Hong Kong dollars and imports for January-June this year are over 20 per cent up on last year's corresponding figures. This is a measure of the phenomenal growth that has taken place in this tiny (400 sq miles) British colony on the south China coast. These figures, coupled with an impressive export performance, have shot Hong Kong into the world's top 20 traders.

UK share of the market

UK performance in this crown colony has failed to keep apace with that growth. From a market share of 11.6 per cent in 1958, the UK now figures sixth in the league, with only 4.5 per cent. Performance in 1976 illustrated all too clearly how the UK has been slipping. A 6.9 per cent improvement in value terms over the previous year might appear as a creditable performance. But, given that Hong Kong's total imports for that year rose by over 29 per cent, it is easy to see why the UK share reached an all-time low of 4.2 per cent.

Fortunately, last year saw a resurgence of British interest in the market and, for the first time in many years, the decline was arrested. Thanks to the efforts of exporters who have studied and attacked the market, Hong Kong's imports from Britain this year are running at about 26 per cent up on last year, which is higher than the percentage increase in the colony's total imports.

With the stage thus set, British exporters should look closely at the opportunities that exist for their particular product. Major and specific projects are regularly reported to the export services and promotions department of the Department of Trade in London. A breakdown of British exports to Hong Kong in 1977 reveals that they cover the board. Only transport equipment (11 per cent), non-electrical (11 per cent) and electrical machinery (12 per cent) are sizeable identifiable sectors. And yet, UK exports of textile yarns, fabrics and made-up garments increased by 38 per cent, of leather and fur goods by 51 per cent, and metal manufactures by 45 per cent.

British exporters should remember that Hong Kong's textile and clothing industry still accounts for nearly half its current total exports and that to meet the challenge from its neighbours in Korea and Taiwan, it has been rapidly improving the quality of its products. Hence a demand exists for sophisticated textile and making-up machinery, measuring and quality control instruments and for better fabrics.

Being well-aware of its past reliance on clothing and textiles, Hong Kong is seeking to diversify its industrial base. This must result in yet further openings for British exporters, for example in plastics and metal working machinery. Hong Kong is already the world's largest single exporter of clothing, toys and torches and the world's second largest exporter of watches. If it is to continue to succeed in these areas, Hong Kong must increasingly put the emphasis on quality, and British exporters of precision technology and equipment should watch the market carefully.

Current projects

Manufacturers of capital goods and their sub-contractors ought to be aware of the major projects at present being undertaken or seriously considered in Hong Kong. They include a new, 4 × 350 MW power station at Castle Peak for the Kowloon Electricity Supply Co Ltd (Kesco); an associated 400 kW EHV transmission system; a possible, new, dual-fired power station for the Hong Kong Electric Company; the mass transit railway (MTR) system which, when completed in 1982, will carry more passengers per day than London's underground; the modernisation (including double tracking and electrification) of the Hong Kong sector of the Kowloon-Canton railway (KCR); the development of a modern transport system on the north side of Hong Kong island; and the construction of a road link by bridge or tunnel from Kowloon to the hitherto undeveloped island of Lantao and the construction thereon of a new replacement airport for Kai Tak.

Details of all these projects are available from the Department of Trade in London and the trade commission in Hong Kong is actively involved in maintaining close contacts with the Hong Kong government's commercial and engineering personalities responsible for their implementation.

The Hong Kong government also plans to spend more than £100 million per annum on the construction of new housing and £200 million per annum on road construction and civil engineering over the next four to five years. There is also a rapidly expanding health programme including new hospitals. Details of all these projects are publicised regularly by the export intelligence service of the British Overseas Trade Board. The BOTB and the British Trade Commission in Hong Kong are ready to help firms which can secure business from these opportunities.

Western influence

Exporters of consumer goods should not be deterred by the small size of Hong Kong's population (4.5 million, of which 98 per cent

are Chinese). Not only is the bulk of the population under the age of 25 and, largely through television, increasingly influenced by western tastes and fashions, but Hong Kong has a thriving tourist industry. Last year, over 1.75 million visitors spent nearly £500 million, over half of which was on shopping. This is a lucrative sector of the market for British consumer goods. Products sold in Hong Kong to Asian tourists will carry the British sales message to all areas of the Far East, especially Japan.

A straightforward market

For the British exporter, Hong Kong not only presents a golden opportunity but it is also a straightforward market in which to conduct business. English is the commercial language and there are no import controls, no tariffs (apart from fuel oils, alcoholic beverages and tobacco) and no exchange control. The standard of business ethics is high, there is a lot of goodwill towards Britain and business is governed by British law.

It is worth coming to take a look at the Hong Kong market. Even those who have long-standing agency arrangements should check on their performance. There is ample evidence of British goods in Hong Kong from a wide range of consumer products, including food, to electrical generating equipment, buses and hovercraft. Invisible British exports include shipping, banking and consultancy.

UK consultants are much in evidence in, for example, the MTR, the Lantao fixed crossing, KCR modernisation/electrification, and Diptrans (development of integrated transport system): British firms can follow up these openings.

Recent successes by British manufacturers include GEC's £100 million contract to build the first two of the proposed four turbine generators for Kesco's oil/coal-fired power station; the supply of Rolls-Royce RB211 engines for Cathay Pacific's new fleet of Boeing 747 aircraft; a contract to expand the computerised aircraft departure control system at Kai Tak airport; mechanical, electrical and control equipment for the £2.5 million postal mechanisation system for the International Mail Centre; equipment worth over £300,000 for what is believed to be the largest air-conditioning system in the world to use plate heat exchangers; and coin-box telephones worth approximately £200,000. In addition, Britain secured a good share of the electrical and mechanical requirements for the first phase of the mass transit railway. These included the air-conditioned rolling stock, signalling system, emergency lighting, repair and maintenance equipment, the provision and laying of the track, and train operator cab simulators for training purposes. British exporters can and should build on these successes.

Like all open markets, Hong Kong requires careful attention to realise the opportunities it offers. Quite apart from being a major market in its own right, it is an invaluable outpost for the UK in the expanding markets of the Far East. It is difficult to understand why so many firms neglect it. Connected with the UK by British Airways' daily flights, and with excellent commercial, financial and communication links with Japan, China and the whole of south-east Asia, Hong Kong is surely a shop window for British goods on a prime site. If you haven't tried to sell in Hong Kong, you really don't know what you are missing. If you have tried, do please check that your performance matches the current potentiality of this exciting market.

Further information

The Trade, Industry and Customs Department of the Hong Kong government (at Ocean Centre, Kowloon, Hong Kong) would be delighted to be of assistance to any British company interested in making use of Hong Kong's facilities.

The Department of Trade's Hong Kong desk in London is on 01-215 5642.

An attractive and profitable base

Why do British industrialists tend to underestimate Hong Kong's importance as a market, a distribution centre for south-east Asia, and a manufacturing base? Ray Porter, deputy commissioner, industry, of the Trade, Industry and Customs Department Hong Kong, focuses on the manufacturing aspect of doing business in this the fastest-growing market area in the world.

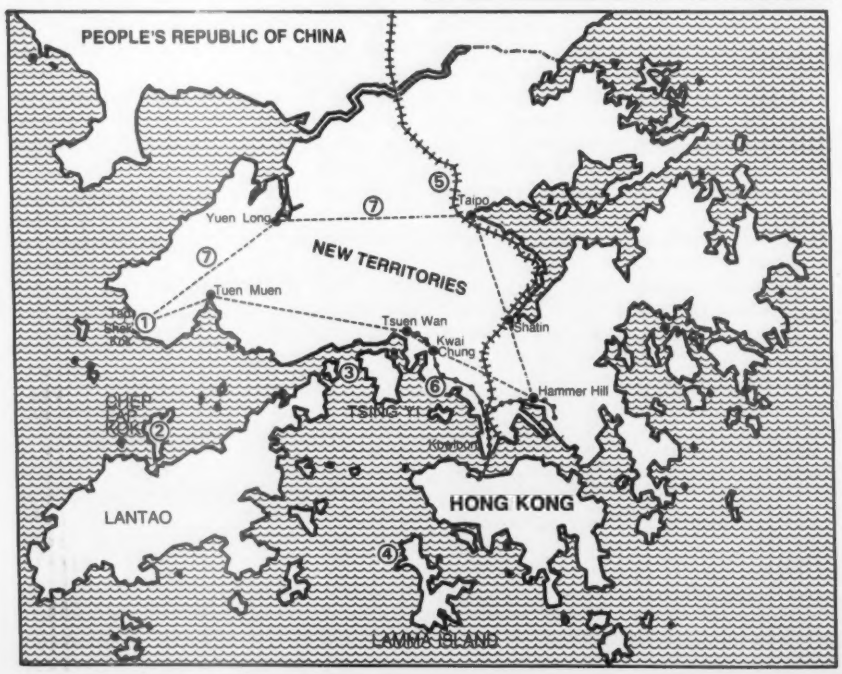
Many British products do not sell as well in Asia as they used to simply because there are now similar goods more readily available from competitor countries at a lower price and with lower freight rates. British manufacturers therefore have a clear choice: either resign themselves to a declining share of the fastest-growing market area in the world or to stimulate further growth by supplementing production from an Asian plant.

Britain's share of overseas industrial investment in Hong Kong has declined along with its market share. This is an indication of the relationship between the two. From being, only a few years ago, the premier source of overseas investment in Hong Kong's industry, Britain is now a poor third, with only 7 per cent of the total(the United States has 46 per cent and Japan 19 per cent).

Over the past year, however, there have been increasing signs of a renewed awareness among British companies of the advantages and, for some, the virtual necessity of producing some of their goods in Hong Kong if they are to penetrate this exciting Asian market.

Help for British companies

The Trade, Industry and Customs Department in Hong Kong is at present assisting several British companies in establishing new plants or in arranging to have their products manufactured under joint venture or licensing arrangements. A substantial number of com-



Major construction projects in Hong Kong and its new territories

Key

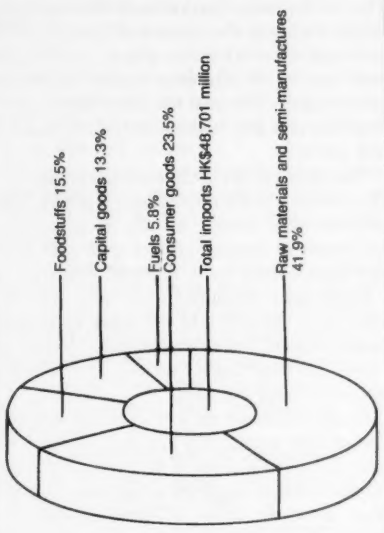
The map indicates, by numbers, projects which are either being worked on at the moment, or which are seriously under consideration. These projects could prove a valuable market for manufacturers of capital goods and their sub-contractors.

1 Castle Peak power station for Koloon Electric Supply company
2 Proposed new airport at Chep Lap Kok
3 Proposed island-hopping fixed crossing between Lowloon and Lantao
4 Power station for Hong Kong Electric Company
5 Modernisation of Kowloon-Canton railway
6 Mass transit railway (underground)
7 400 kW ehv transmission system for China Light and Power Company

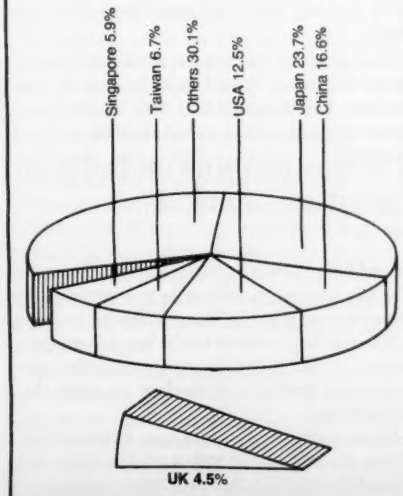
panies is being helped to evaluate Hong Kong's potential as a manufacturing base for their particular products and to carry out detailed feasibility studies. Many of these studies will result in new production in Hong Kong, to the advantage of both parties.

On the other hand, some of these studies will amount to nothing. It is inevitable that some companies will conclude that manufacturing in Hong Kong would not significantly increase their growth. If that is a conclusion reached on a full study of the facts, the Hong Kong government would be the first to advise the company concerned against setting up there. It prides itself on being realistic and it sticks firmly to a basic belief in the value to the economy of profitable industry and in the undesirability of fostering industry that is not commercially viable.

HONG KONG'S IMPORTS BY CATEGORIES



HONG KONG'S IMPORTS BY SUPPLIERS



Hong Kong is not necessarily the perfect answer to every manufacturer's dreams. Equally well, it is an attractive and highly profitable base for many industries. The main contributory factors to its attractiveness are that:

- ☐ Hong Kong government policies are stable and are designed to encourage personal and corporate initiatives.
- ☐ Taxation is not only low, it is simple – and simplicity in this field is today both unusual and valuable.
- ☐ Hong Kong is entirely a free port, other than for excise duties on petroleum products, alcohol and tobacco and a tax on cars; so capital equipment and raw materials can be imported freely from any source and without any government interference just as easily as finished products can be exported.
- ☐ There are no restrictions on the ownership of companies, the nationalities of company directors or the sources of company finance. There is no pressure for the localisation of company ownership or management.
- ☐ Hong Kong has excellent communications, including the most efficient telephone and telex services in Asia.
- ☐ Hong Kong's container port is the world's third largest in terms of throughput of cargo, and ships normally turn around in it within 12 hours, which is as fast as anywhere in the world. It also has Asia's only computer-controlled air cargo terminal and the region's most efficient air cargo service.
- ☐ Banking, insurance, and other commercial facilities are well developed, efficient and sophisticated. Loan capital can be raised in Hong Kong at highly competitive rates of interest.
- ☐ Many Hong Kong-made products can be imported into Europe, north America, Japan and Australia duty free, or at preferential rates of duty.
- ☐ Supporting industries are generally well developed.
- ☐ There is a relatively good supply of well-educated, high-quality engineers, technologists and technicians.
- ☐ The labour force is intelligent, hard working and adaptable.
- ☐ Productivity is high.

Best possible environment

The Hong Kong government does not attempt to decide which industries should be developed. It aims to provide the best possible business and industrial environment, infrastructure and services and then leaves it to market forces to dictate the direction taken. Nevertheless, the market's positive attractions taken together with the restraining factors, such as the competition at the lower end of the market from countries that have lower labour costs and less-enlightened labour legislation, indicate the areas that offer the best growth potential.

In fairly broad terms these will be in the fields of sophisticated light consumer and industrial products, such as domestic appliances, cameras, weighing machines, measuring equipment, medical instruments, and industrial valves. There is also excellent potential, although for a smaller number of companies, in the heavier industries engaged in casting, forging and steel fabrication.

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Overseas trade exhibitions

British enterprise on show at book fair

From Mike Hilton, British consulate-general, Frankfurt

All existing records were broken at the thirtieth Frankfurt book fair, which took place from 18 to 23 October. Nearly 5000 exhibitors from 78 countries exhibited some 282 000 titles, including 84 500 new publications, and the attendance was 203 400.

The ability and eagerness of the British publishing industry to export was again much in evidence. Over 500 UK firms, formed, as usual, the largest non-German contingent at the fair with 201 exhibitors forming a joint venture sponsored by the Book Development Council and the British Overseas Trade Board. The British Council stand showed over 5300 titles from more than 300 publishers, and included a special section devoted to 'The child and the book' – the theme of this year's fair.

British exhibitors generally considered the fair to have been a resounding success. Mr Rogers, chairman of Brimax Books, said he was 'delighted'; Curtis Brown reported 700 inquiries and Macmillan 1200.

The Automobile Association took an order for 1000 copies of a four-volume work priced at £150 per set which is not even due to be published until 1981, and one enterprising company managed to sell the rights for a book on the sex life of plants to 11 countries.

Julian Friedmann of Julian Friedmann Publishers described the book fair as 'the best week of the publishing year'. He had already sold some rights within 10 minutes of arriving at his stand.

Patsy Bradbury of Quarto Publishing was so busy answering inquiries that she 'saw broad daylight for only 10 minutes during the whole fair'.

Full marks for enterprise go to, among others, Allen and Unwin. The company had finished copies of a book giving a complete account of the world chess championship in Manila on its stand, on 21 October, only three days after Karpov had defeated Korchnoi in the final game.

Transport '78 has come a long way

From C. Pattison, British consulate-general, Munich

'Transport 78' was the federal republic's first exhibition designed to cover all aspects of the transportation of passengers and goods. The co-ordination congresses which ran parallel to the exhibition attracted 1200 experts from all over the world.

Over 300 exhibitors took part, of which 102 were from 15 countries. This represented a high proportion for a first event and augured well for the future.

Among the foreign contingent, Britain was well represented taking, with a total of 18 firms, second place only to Italy with 22.

Of the 18 British firms at the exhibition, 13 took part in a joint venture organised by the British Overseas Trade Board and the London chamber of commerce. The British contingent was more than satisfied with the results obtained at 'Transport 78' and most have already said that they will be at the next.

All British exhibitors commented on the senior level of the visitors to the exhibition and made good contacts, many of which were expected to lead to substantial business.

'Transport 78' has come a long way since its modest beginnings as 'containerisation' four years ago. When it ended exhibitors and congress participants were convinced that it had been a great success and the signs are that the next 'transport', to be held in Munich in four year's time, will be much larger.

Attendance boost at German office fair

From H. H. Mock, British embassy, Bonn

Orgatechnik, the second international trade fair for office fittings and equipment which took place from 24 to 29 October in Cologne, experienced an up-swing both in the number of exhibitors and trade visitors.

The number of exhibitors increased by 50 per cent to a total of 825 firms from 18 countries, and the number of visitors increased by 58 per cent to 65 000 including 4700 visitors from 57 countries.

The range of products on display included office furniture and furnishing, data and text processing equipment and systems, calculating and money counting and sorting machines, organisational aids and office supplies.

In general, German and foreign exhibitors and visitors alike described the concept of this fair as a success. Exhibitors were impressed with the high quality of buyers and the level at which business discussions were conducted.

The 16 British exhibitors who showed their range of products on a joint venture, sponsored by the Business Equipment Trade Association and the British Overseas Trade Board on the whole shared this opinion.

British exhibitors of high-quality furniture for boardrooms and managers' offices reported great interest in their tables, desks and chairs made of mahogany and oak which with rosewood, teak and American walnut are at present the most popular woods for this type of furniture.

Buyers were attracted by ranges of excellently designed desk accessories in wood, leather and aluminium, as displayed by two joint-venture exhibitors.

British exhibitors of office and filing systems, and wall partitionings also reported good contacts made with trade visitors from all European countries (including Scandinavia), the United States, Australia, South America, South Africa, Canada and the Arab countries at their stands. Numerous inquiries were received from distributors and agents wanting to represent the UK firms in their countries.

At the end of the fair, British exhibitors were very optimistic about business expected as result of their participation.

The next Orgetechnik is scheduled to take place from 21 to 26 October 1980.

More sails but fewer sales

From A. A. Windham, British consulate-general, Hamburg

This year, the Hamburg boat show lacked some of the superlatives of previous years. Thus in the boom market of 1976 it was possible to highlight the volume of sales. In 1977, although the market was quieter, the largest-ever number of exhibitors joined the British joint venture. This year has proved to be one of consolidation and critical analysis of products and markets.

The strong point of the show held from 19 to 29 October was the opportunity it afforded the considerable team of 68 joint-venture exhibitors to strengthen ties with and meet new agents from many different countries.

Equipment manufacturers were on the whole well pleased. On the other hand boat manufacturers have traditionally hoped at least to sell their display vessels. This year this was not always the case.

Recent statistics show that in the first half year of 1978 against the first half year of 1977 there has been a drop of 10.5 per cent in the number of boats imported to Germany. On the other hand the value of these imports has increased by 9.7 per cent. But exhibitors reported that the quality of visitors was good. One exhibitor showing a single cruising yacht returned to the UK with the names of 30 'first class' prospects – but like others he could claim no sales.

Attendance figures show no appreciable difference from last year at 147 000, and the show retains its very international character – there were around 1000 exhibitors from 28 countries.

In a more critical market it was the view of most that sales would take longer to materialise. Few doubted that they would do so.

UK has designs on Belgian furniture market

From M. W. Hewitt British embassy, Brussels

The aim behind 'Interieur' is to stimulate and promote creativity in interior design and the articles on display must be the latest in modern design. In fact the organisers reserve the right to ban any product which does not meet this requirement.

Since it started 12 years ago, Interieur has grown steadily and is today an attractive and important event in the exhibition calendar.

The sixth held in Kortrijk from 21 to 29 October enhanced Interieur's reputation.

Well over 200 exhibitors took part and demand for space was met only by constructing an annex to the modern exhibition halls. 124 000 visitors, including 14 600 professionals, came to Interieur, many from Germany, France and Holland. This was the highest number yet recorded at this series.

A dazzling range of products was on show – furniture, kitchen-tableware, lighting, floor and wall coverings, textiles, with Italian and Scandinavian companies out in force.

For the first time there was a strong British presence in the form of a joint venture of 14 companies sponsored by the Design Council and the British Overseas Trade Board. The joint venture had an excellent position in its own hall into which led the only public entrance, and all visitors had to pass the British group.

The stands of John Makepeace Workshop and Richard La Trobe-Bateman with examples of furniture commissioned by individual customers, attracted great attention. Visitors recognised the work as outstanding and unique in the whole exhibition. The Designers Guild showed a brand new collection of co-ordinated fabrics and wallpapers for 1979 on a stand greatly admired for its clever presentation and charm.

Wrighton International's latest range of top quality kitchens attracted large numbers of visitors, as did H. K. Furniture's design upholstered seating.

All the British exhibitors were very pleased with Interieur and with the results. It is not the type of exhibition which produces large orders, but is a highly effective way of making contacts with the key professionals for example interior decorators, architects and design consultants and of introducing new products to this wealthy part of Europe.

The joint venture was an unqualified success and the participants look forward to returning to Kortrijk in 1980.

Testing fair for UK firms

From Helen Taylor, British embassy, Paris

Automatic Testing '78, combining a conference and an exhibition, was held in Paris from 23 to 26 October. This is a peripatetic event organised by a British company, and was held this year in the Palais des Congrès.

The organisers estimated that 75 per cent of the world's manufacturers – from the United States, Britain, France and Germany – were present; while visitors included those attending the conference being held in the adjacent auditorium plus other potential customers specially invited to view the exhibition.

This was, therefore, a select gathering of the key figures in this rapidly evolving industry; the purpose was to discuss with customers how the electronic equipment on show, often developed by companies to provide in-house testing, might be utilised to meet their particular requirements.

Nine British companies made up a joint venture sponsored by the Electric Engineering Association and British Overseas Trade Board. Racal Automation, and its sister company with a French subsidiary, Racal-dana Instruments, were both present and obtained a great number of serious inquiries. Marconi Instruments was also present, with Marconi Space and Defence Systems and Marconi – Elliott Avionic Systems, who demonstrated its capability to provide anything from testing equipment to components to complete turnkey operations for each of the armed services. The last of these companies reported particular interest in its digital card testing facility from a wide range of customers.

Columbia Automation reported a high level of inquiries for its competitively priced equipment just over half of which were from French visitors. Micro Consultants, displayed components for testing systems, and was also pleased with the opportunity provided by the exhibition to make themselves known in the French market. Gould Advance also had a useful show, once again in the French market in particular.

Of the British companies exhibiting outside the joint venture, British Aerospace was represented by its Aircraft and Dynamics Groups. They all were profiting from this opportunity to work out with visitors how the sophisticated testing facilities used in the development of new aircraft could be applied in different fields. Membrain, a rapidly expanding company, reported that this had been its best show ever.

The event, which last year was held in Britain, moves to Germany next year.

Joint venture nets £125,000 in orders

From G. A. Kent, British consulate-general, Boston

Fish Expo held alternately in Boston and Seattle, has grown markedly in size and importance since it started in Boston 12 years ago.

The recent introduction of the 200-mile fishing limit has given a great boost to fishing interests; whereas when the exhibition was held in Boston in 1976 there were 247 exhibitors, in 1978 there were 313.

The exhibition held this year from 25 to 28 October in Boston is international and drew over 8000 visitors from many countries. This year there were 14 exhibitors from Canada, 12 from the UK, nine from Norway, three from Iceland, two from west Germany, one from Panama, one from Spain and one from Sweden. The exhibits covered a comprehensive range of equipment and machinery of interest to the fishing industry, both ashore and afloat.

The British joint venture, sponsored by the Westminister Chamber of Commerce and the British Overseas Trade Board had high praise for the exhibition and were well pleased with the interest taken in their products.

Sales of £124,765 were reported, with potential business of £254,269 placed for the ensuing year. All participating firms showed interest in exhibiting in Seattle in 1979.

Dr A. C. Jason of the Torrey Research Station, Aberdeen, was a speaker at one of the morning seminars, on 'Electrical methods for measuring fish freshness.'

Other British products noted included electronic navigational aids on the stand of ITT Decca, and on the stands of agents, twine cordage and netting from Bridport-Gundry (Holdings) Ltd, diesel engines from British Leyland, Ford, Lister, and Perkins, Sestrel navigational instruments from Henry Browne & Co, marine radar from Electronic Laboratories (Marine) Ltd, and electronic navigational aids from SI-TEX, American subsidiary of Kelvin Hughes Ltd.

In 1979 Fish Expo will be held at the Center Coliseum in Seattle from 24 to 27 October.

New products draw inquiries at wire show

From Val Lammert, British consulate-general, St Louis

British exhibitors achieved considerable success at the forty-eighth annual convention and exhibition of the Wire Association of America, held at the Chase Park-Plaza Hotel, St Louis, from 16 to 18 October.

Most of the 10 British companies who took part in the joint venture sponsored by the International Wire and Machinery Association and supported by the British Overseas Trade Board, are well established in the very competitive north American market. However, first time exhibitors at this event, including Manchester Steel and BNF Metals Technology Centre, were well pleased both with inquiries received at the show and prospects for eventual business in the United States.

New products developed by British exhibitors drew considerable interest at this year's show, including a fluidised bath (a bed of aluminium oxide particles) designed for cleaning small parts. This unit, developed by Techne of Cambridge, appeals to smaller manufacturers. An auto-readout laser diameter gauge, designed for the non-contact measurement of profiles by Beta Instrument Co Ltd, attracted a number of inquiries.

Equipment manufacturers do not normally expect to realise actual sales at these shows, but sales were concluded by Hi-Draw Machinery selling a £65,000 26-inch Bull Block machine off its stand and it had serious inquiries for possibly two or more of these machines. Orders were also taken by A. M. Lock and Co for their eddycurrent flow detection systems, and by Beta Instruments Co Ltd for their auto-readout capacitance monitor.

Attendance at this year's convention was estimated at 3700 visitors setting a new record. The 1977 event held at Boston attracted 3500 visitors.

Starting in 1983, the Wire Association of America plans to hold its major convention/exposition in odd numbered years, alternating between Chicago and Boston, leaving the even-numbered years, open so that American companies can take part in the international wire exhibition held bi-annually at Basle, Switzerland.

ECGD addresses

The Export Credits Guarantee Department's head office is at Aldermanbury House, Aldermanbury, London EC2P 2EL, tel. 01-606 6699. ECGD has 10 local offices in various parts of the United Kingdom, and these are listed from time to time in *Trade and Industry*.

Overseas trade country data

Argentina

New temporary admission rules. The Argentine Ministry of Economy has passed decree 2191, 19 September, which changes the rules for temporary admission of goods.

An unofficial translation of this decree is available from OTAR 01-248 5757 ext. 474/476.

Australia

Asbestos. A notice in *Trade and Industry*, 7 July, reported that the Australian government had requested the Industries Assistance Commission (IAC) to inquire into the short-term assistance needs of the local industry producing asbestos (tariff item 25-24).

The government has accepted the recommendations of the IAC which were against giving such assistance to the industry.

Inquiries: CRE 01-215 5319.

Ref: CRE 1060/78.

Fiji

Poultry and poultry products. The Fiji government has passed the Customs (Prohibited Imports) (Amendment) (No 5) Order 1978 so that from 19 October the import of live poultry classified in item 01.05.00.00, dead poultry and edible offals thereof classified in items 02.02.00.01 and 02.02.00.09, poultry liver classified in item 02.03.00.00 and eggs classified in item 04.05.00.00 is prohibited except in accordance with the terms of a licence issued by the permanent secretary for agriculture and fisheries.

Inquiries: OTAR 01-248 5757 ext. 469/401/468.

Further information

In many cases further information on the notices published on these pages is available to British exporters from the Department of Trade. The main branches concerned are: Commercial Relations and Exports (CRE) Division, 1 Victoria Street, London SW1H 0ET (tel: direct dialling); and Overseas Tariffs and Regulations Section (OTAR), Export Data Branch, Export Services and Promotions Division, Export House, 50 Ludgate Hill, London EC4M 7HU (tel: 01-248 5757). In each case, the relevant information source is indicated at the end of the notice by its initials (OTAR or CRE) and, in the case of OTAR, the telephone extension.

Japan

Ban on chemical substances. Information has been received that the *Official Gazette*, 27 September, announced a ban on the use of the chemical substance Tris (2,3-dibromopropyl) phosphate (TDBPP), an anti-fire agent, and triphenyltin compounds in certain household products including sleepwear, bedding, curtains, carpets, babywear, underwear, gloves, hosiery, household adhesives and paint and wax shoe polish.

The ban on TDBPP took effect on 1 November 1978 and will be applied for triphenyltin compounds from 1 January 1979. Tests must show that none of the substances is present in the specified household articles.

Details of the test procedures are included in the Law for the Control of Household Products Containing Harmful Substances 1973, which also includes tests for hydrogen chloride and/or sulphuric acid, vinyl chloride (monomer), organomercury compounds, formaldehyde, tris (1-azindinyl)-phosphine oxide and dieldrin.

Advance copies of the official translation of the law are available from OTAR 01-248 5757 ext. 420/475.

Malawi

High commission moves. The British high commission in Blantyre will close on 1 December, when the commercial department transfers to Lilongwe.

Correspondence from that date should be addressed to: Commercial Department, British High Commission, Lingadzi House, PO Box 300 42, Lilongwe 3, Malawi.

Malaysia

Import duty changes. The Malaysian government has amended the first schedule to the Customs Duties Order 1978 so that it now reads:

Heading no./Description	Unit of qty.	Import duty Full	Pref.
21.04 Sauces; mixed condiments and mixed seasonings			
200 Tomato sauce	litre	40% or 66 sen whichever is the higher	
39.01 Condensation, polycondensation and polyaddition products, whether or not modified or polymerised, and whether or not linear (for example, phenoplasts, aminoplasts, alkyds, polyalkylesters and other unsaturated polyesters, silicones)			
In the form of plates, sheets, film, foil or strip			
Plates and sheets			
Reinforced with paper or textile			
25 Rigid	m³	50% or $5 per kg whichever is the higher	
39.02 Polymerisation and copolymerisation products (for example polyethylene, polytetrahaloethylenes, polyisobutylene, polystyrene, polyvinyl chloride, polyvinyl acetate, polyvinyl chloroacetate and other polyvinyl derivatives, polyacrylic and polymethacrylic derivatives, coumarone-indene resin			
In the form of plates, sheets, film, foil or strip			
Plates and sheets			
Reinforced with paper or textile			
43 Rigid	m³	50% or $5 per kg whichever is the higher	
39.03 Regenerated cellulose; cellulose nitrate, cellulose acetate and other cellulose esters, cellulose ethers and other chemical derivatives of cellulose, plasticised or not (for example, collodions celluloid); vulcanised fibre			
Plates and sheets			
Reinforced with paper or textile			
41 Rigid	kg	50% or $5 per kg whichever is the higher	
73.38 Tubes and pipes and blanks therefor, of iron (other than of cast iron) or steel, excluding high pressure hydro-electric conduits:			
931 15 cm and less than 43 cm in internal diameter	tonne	25% or $123.03 whichever is the higher	
932 43 cm and not more than 180 cm in internal diameter	tonne	15%	
85.05 Tools for working in the hand, with self-contained electric motor:			
Tools:			
110 of 1.5 kW and below	No.	30%	
190 of over 1.5 kW	No.	10%	
84.12 Air conditioning machines, self-contained, comprising a motor-driven fan and elements for changing the temperature and humidity of air:			
Parts:			
991 for sub-headings 84.12 100 and 84.12 200	No.	20%	
992 for sub-heading 84.12 300	No.	50%	
999 for sub-headings 84.12 910, 84.12 920, 84.12 930, 84.12 940, 84.12 950 and 84.12 960	No.	45%	
85.15 Radiotelegraphic and radiotelephonic transmission and reception apparatus; radio-broadcasting and television transmission and reception apparatus (including receivers incorporating sound recorders or reproducers) and television cameras; radio navigational aid apparatus, radar apparatus and radio remote control apparatus:			
Colour television receivers, including receivers incorporating sound recorders or reproducers:			
210 mains operated, with screen of 41.6 cm and below	No.	25%	
220 mains operated, other	No.	35%	
230 battery operated, with screen of 41.6 cm and below	No.	25%	
231 battery operated, other	No.	35%	
Monochrome television receivers, including receivers incorporating sound recorders or reproducers:			
250 mains operated, with screen of 41.6 cm and below	No.	25%	
260 mains operated, other	No.	35%	
270 battery operated, with screen of 41.6 cm and below	No.	25%	
271 battery operated, other	No.	35%	
87.02 Motor vehicles for the transport of persons, goods or materials (including sports motor vehicles, other than			

Heading no./Description	Unit of qty.	Import duty Full	Pref.
those of heading no. 87.09):			
Passenger motor cars (other than public-service type vehicles), including vehicles designed for the transport of both passengers and goods:			
Dual purpose vehicles:			
101 completely knocked down	No.	Nil	
102 completely built up	No.	30%	
Other:			
110 completely knocked down	No.	Nil	
87.10			
Cycles (including delivery tricycles), not motorised:			
100 Bicycles (including children's bicycles in the normal form of adult bicycles)	No.	$60 each	
200 Tricycles, delivery (excluding children's tricycles)	No.	$18 each	
300 Trishaws	No.	$18 each	
900 Other	No.	$18 each	
87.11 000			
Invalid carriages, whether or not motorised or otherwise mechanically propelled (motorised or not)	No.	Nil	
87.12			
Parts and accessories of articles falling within heading no. 87.09, 87.10 or 87.11:			
Parts and accessories of articles falling within heading no. 87.09:			
101 spokes	Value	25% or 1½ sen each whichever is the higher	
109 nipples	Value	25% or 1½ sen each whichever is the higher	
87.11 190			
Other	Value	25%	
Parts and accessories of articles falling within heading no. 87.10:			
201 complete frames	No.	$30 each	
202 parts of frames	No.	$15 each	
203 saddles	No.	$3 each	
204 handlebars (with or without brake fittings)	No.	$6 each	
205 rims (excluding tyres and tubes)	No.	$5 each	
206 seat pillars	No.	33⅓%	
207 lamp brackets	No.	33⅓%	
208 mudguards	No.	$1 each	
209 chain wheels and cranks	No.	33⅓%	
210 front forks	No.	$3 each	
211 bracket lugs	No.	$15 each	
212 reflectors	No.	33⅓%	
213 carriers	No.	80 sen each	
Parts and accessories falling within heading no. 87.10:			
215 spokes	Value	25% or 1½ sen each whichever is the higher	
216 nipples	Value	25% or 1½ sen each whichever is the higher	
298 other parts	Value	Nil	
299 other accessories	Value	20%	
Parts and accessories of articles falling within heading no. 87.11:			
911 spokes	Value	25% or 1½ sen each whichever is the higher	
919 nipples	Value	25% or 1½ sen each whichever is the higher	
990 other	Value	Nil	
87.13			
Baby carriages and parts thereof:			
100 Baby carriages	No.	$5 each	
Parts:			
211 spokes	Value	25% or 1½ sen each whichever is the higher	
219 nipples	Values	25% or 1½ sen each whichever is the higher	
290 other	Value	35%	
87.14			
Other vehicles (including trailers), not mechanically propelled, and parts thereof:			
100 Trailers and semi-trailers of the caravan type for housing or camping	No.	30%	
200 Trailers and semi-trailers for the transport of goods	No.	30%	
300 Other vehicles	No.	Nil	
Parts:			
911 spokes	Value	25% or 1½ sen each whichever is the higher	
919 nipples	Value	25% or 1½ sen each whichever is the higher	
990 other	Value	Nil	
97.01			
Wheeled toys designed to be ridden by children (for example, toy bicycles and tricycles and pedal motor cars); dolls' prams and dolls' push chairs:			
100 Bicycles and tricycles designed to be ridden by children (not in the normal form of adults' cycles)	No.	$5 each	
200 Other wheeled toys	No.	Nil	
300 Dolls' prams and dolls' push chairs	Value	Nil	
Parts:			
for sub-heading 97.01 100:			
401 spokes	Value	25% or 1½ sen each whichever is the higher	
909 nipples	Value	25% or 1½ sen each whichever is the higher	
919 other	Value	35%	
other than for sub-heading 97.01 100:			
422 spokes	Value	25% or 1½ sen each whichever is the higher	
923 nipples	Value	25% or 1½ sen each whichever is the higher	
929 other	Value	Nil	
97.06			
Appliances, apparatus, accessories and requisites for gymnastics or athletics, or for sports and outdoor games			
121 Golf balls	No.	50 sen each	

Inquiries: OTAR 01-248 5757 ext. 469/401/468.

Mauritania

Visas. The Mauritanian government has recently adopted a new system where all visa applications received in Dakar and Paris have to be referred to Novakchott. Long delays are therefore likely to be encountered.

Inquiries: CRE 01-215 5334.

Mexico

Tariff amendments. Acuerdos of the Secretaria de Comercio published in the *Diario Oficial*, 20 October, amended the official prices of goods in the following headings:

29.30.A002, 29.35.B060, 29.35.B066, 29.35.B067, 29.35.C007, 29.42.A045, 69.11.A001, 69.13.A001.

Inquiries: OTAR 01-248 5757 ext. 474/476.

Norway

Imported tractors. The Norwegian Ministry of Finance has decided that the value of the driver's cabin should not be included in the duty basis for import duty on tractors.

The value of the protective frame therefore should not be included in the duty basis either.

In cases where the value of the drivers cabin/protective frame is not indicated on the import invoice, the importer must ensure that the customs authorities are given the necessary specifications, ie a documented survey of the value.

Inquiries: OTAR 01-248 5757 ext. 458.

Peru

Tariff amendments. The Peruvian customs authorities have introduced changes in customs duties as a consequence of article 57 of the mechanical engineering programme (Andean pact).

It has been decided that the common external tariff rates should be applied to certain products originating outside Andean pact countries.

The items affected fall within the following tariff numbers:

ex 84.19, ex 84.37, ex 84.38, ex 84.41, ex 84.42, ex 84.56, ex 84.59, ex 84.61, ex 84.63, ex 85.01, ex 90.17, ex 90.27, ex 91.05, and 97.03.

In addition a specific product (ie size or type) under some tariff headings may have a different import duty.

Inquiries: OTAR 01-248 5757 ext. 474/476.

Thailand

Drug regulations. The Thai Ministry of Public Health has published regulations for certain drugs (including some for veterinary use) detailing the warnings and precautions that have to be included on the accompanying literature and leaflets.

These regulations come into force on 3 December 1978. Copies of these regulations can be obtained from OTAR 01-248 5757 ext. 401/468/469.

United States

Speciality steel. Imports in pounds weight from the EEC for the product under quota as at 20 October:

Plates of stainless steel (item 923.21) 2,799,187.

Inquiries: CRE 01-215 5397.

CRE Commercial Relations and Exports Divisions
Tel. Direct dialling (see end of each notice)

OTAR Overseas Tariffs and Regulations Section
Tel. 01-248 5757 (extension at end of each notice)

Statistics

The economy: selected indicators

Series are seasonally adjusted except where shown otherwise

	Gross domestic product (average estimate)	Consumers' expenditure	Fixed capital expenditure			Changes in stocks				Balance of payments		
				of which			of which					
			Total	Manufacturing industry	Distributive and service industries excl. shipping	Total	Manufacturing industry	Wholesalers	Retailers	Current balance	Visible balance	Invisible balance
	at 1975 prices		at 1975 prices			at 1975 prices				at current prices		
Base of index	1975											
Series in		£ million	£ million			£ million				£ million		
Stock level at end-1977						34,469	20,261	4,540	3,181			
1971	94.5	59 340	20 208	3 923	3 888	235	−277	218	12	1 090	261	829
1972	96.7	62 762	20 239	3 398	4 055	73	−279	173	29	135	−722	857
1973	103.4	65 497	21 609	3 504	4 674	2 983	1 336	432	624	−999	−2 383	1 384
1974	101.4	64 070	21 164	3 822	4 605	1 462	1 288	361	−180	−3 591	−5 235	1 644
1975	100.0	63 192	20 817	3 522	3 841	−1 925	−1 221	−249	−100	−1 855	−3 236	1 381
1976	102.9	63 320	20 489	3 345	3 926	261	316	131	13	−1 137	−3 589	2 452
1977	104.8	62 732	19 738	3 573	4 325	1 051	442	266	29	289	−1 709	1 998
1976 2nd qtr	102.7	15 785	5 137	828	972	−34	−46	−10	−67	−313	−949	636
3rd qtr	103.3	15 884	5 168	849	1 005	173	83	81	46	−416	−1 132	716
4th qtr	104.0	15 927	4 997	856	1 014	211	255	17	27	−329	−958	629
1977 1st qtr	103.7	15 619	4 794	851	1 030	475	267	82	117	−495	−973	478
2nd qtr	104.6	15 495	5 025	879	1 044	336	79	179	−4	−297	−762	465
3rd qtr	105.2	15 777	4 965	910	1 103	−7	−18	−80	−59	574	31	543
4th qtr	105.7	15 841	4 954	932	1 149	247	115	85	−33	507	−5	512
1978 1st qtr	106.0	16 361	5 015	920	1 169	324	71	81	62	−317	−612	295
2nd qtr	107.6	16 373	5 024	971	1 172	386	215	−41	128	198	−135	333
3rd qtr		16 648 pe								−44	−269	225
% change last 2 qtrs on prev. 2 qtrs.	+1.3	+2.5	+1.2	+2.7	+4.0							
on a year earlier	+2.5	+5.6	+2.2	+9.3	+12.9							

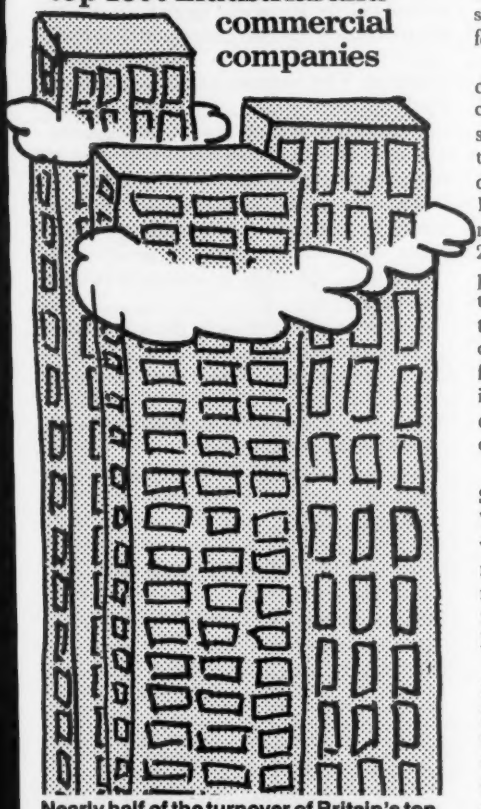
	Industrial production		Personal expenditure		Prices and earnings					Labour (UK)			Visible trade (volume)	
	Total all industries	Total manufacturing industries	Retail sales	Cars: new registrations	Retail prices	% increase on a year earlier	Wholesale prices: all manufacturing industry: basic materials and fuel used	Wholesale prices: all manufacturing industry: manufactured products: home sales	Average gross earnings of all employees (GB, all industries and services covered)	Unemployed excluding school leavers and adult students: mid-month count	Unemployed excluding school leavers and adult students: % of total employees	Unfilled vacancies for adults: mid-month count	Export	Import
				monthly averages									On a balance of payment basis	
	at 1975 prices		at 1971 prices		(not seasonally adjusted)				(old series)				at 1975 prices	
Base of index	1975	1975	1971		Jan 1974		1975	1975	Jan 1970				1975	1975
£m in base year			16,296										19,463	22,699
Series in				thousands						thousands		thousands		
1971	99.8	97.4	100.0	108.5	80.0	9.4	23.2	47.6	118.7	775.8	3.4	130.9	85.4	85.7
1972	102.0	100.0	105.3	138.6	85.7	7.1	24.2	50.1	134.0	854.9	3.7	147.3	85.2	95.3
1973	109.5	108.4	110.3	137.1	93.5	9.1	55.8	66.6	152.1	611.0	2.6	307.0	97.8	108.7
1974	105.1	106.5	109.0	102.8	108.5	16.0	86.3	81.9	179.1	599.7[1]	2.6[1]	302.7[1]	104.3	109.7
1975	100.0	100.0	106.7	97.2	134.8	24.2	100.0	100.0	226.6	929.0	3.9	150.0[1]	100.0	100.0
1976	102.0	101.4	106.5	104.7	157.1	16.5	127.0	117.3	261.9	1 269.8[1]	5.4[1]	120.4[1]	109.8	105.7
1977	105.8	102.9	103.6	107.1	182.0	15.8	145.6	140.6	288.5	1 378.1	5.8	155.6[1]	118.9	107.1
1977 1st qtr	105.6	103.9	103.3	104	174.1	16.5	144.8	133.0	280.0	1 329.5	5.6	..	115.8	109.4
2nd qtr	105.5	102.4	102.5	103	181.9	17.4	148.8	139.6	285.3	1 340.6	5.6	157.7	118.0	109.6
3rd qtr	106.3	103.3	104.3	112	184.7	16.5	146.5	143.8	288.3	1 414.6	5.9	151.9	124.4	106.6
4th qtr	105.9	102.1	104.4	110	187.4	13.1	142.2	145.8	300.4	1 427.8	6.0	160.1	117.6	102.7
1978 1st qtr	107.1	102.5	106.3	129	190.6	9.5	140.2	149.2	310.8	1 409.4	5.9	187.7	119.9	114.1
2nd qtr	111.1	105.0	108.0	130	195.8	7.7	146.3	151.8	329.0	1 372.7	5.7	210.3	122.2	109.6
3rd qtr	110.6	104.8	110.9	132	199.2	7.8	144.9	154.7		1 380.5 p	5.8	213.0	126.2	116.0
1977 Oct	105.6	101.8	102.7	116	186.5	14.1	143.7	145.3	295.8	1 431.5	6.0	156.0	119.0	101.4
Nov	105.6	101.7	103.1	108	187.4	13.0	142.0	145.7	300.5	1 429.6	6.0	159.4	115.1	98.5
Dec	106.4	102.8	106.9	104	188.4	12.1	141.0	146.3	304.8	1 422.3	6.0	165.0	118.8	108.1
1978 Jan	106.9	102.4	104.9	125	189.5	9.9	139.4	148.3	306.3	1 419.2	5.9	180.3	111.7	114.4
Feb	107.4	102.2	106.8	120	190.6	9.5	139.1	149.2	311.2	1 409.0	5.9	187.0	127.2	111.1
Mar	107.1	102.9	107.0	142	191.8	9.1	142.0	150.0	314.8	1 400.0	5.9	195.8	120.9	116.7
Apr	111.4	105.5	106.7	132	194.6	7.9	145.1	150.9	325.7	1 387.1	5.8	203.7	125.7	103.7
May	110.1	103.7	108.4	124	195.7	7.7	146.8	151.9	327.2	1 366.4	5.7	209.9	119.2	113.8
Jun	111.7	105.9	108.7	133	197.2	7.4	147.0	152.7	334.0	1 364.7	5.7	217.4	121.6	111.3
Jul	111.1	105.2	111.4	108	198.1	7.8	145.8	153.8	332.7	1 371.4	5.7	211.0	127.0	115.8
Aug	110.9	105.2	111.8	146	199.4	8.0	144.2	154.8	332.9 p	1 392.1	5.8	209.3	124.9	111.4
Sep	109.8 p	104.0 p	109.5	144	200.2	7.8	144.8 p	155.6 p		1 378.3	5.8	218.7	126.7 p	120.9 p
Oct			109½ p				145.7 p	156.4 p		1 359.6 p	5.7	228.4		
% change latest 3 months														
on prev. 3 months	−0.4	−0.2	+0.7	+2.1	+1.7		−1.1	+1.8	+3.3	+0.7		+2.8	+3½	+6
on a year earlier	+4.0	+1.5	+6.4	+18.1	+7.5		−0.1	+7.7	+16.2	−3.4		+43.8	+1½	+9

p Provisional pe 1st Preliminary e Estimate [1] Average of available months

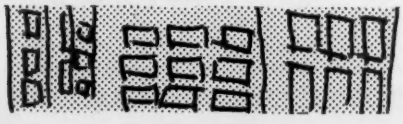
Inquiries: 01-215 3453

HOW MANY and HOW BIG

A survey of Great Britain's top 1500 industrial and commercial companies



Nearly half of the turnover of Britain's top 1500 industrial and commercial companies is accounted for by the largest 60 while the top 20 account for one-third of the capital employed. All told these 1500 companies account for about 85 per cent of all capital employed by industrial and commercial companies. These are some of the findings of a survey of the 1975 accounts of 1500 private sector industrial and commercial companies registered in Great Britain. Stephen Penneck, a statistician in the Departments of Industry, Trade, and Prices and Consumer Protection, describes the survey and the results obtained.



Although the prime purpose of this project was to establish a sampling frame from companies' published accounts so that a new sample of companies could be chosen for the company accounts analysis, it has produced some analyses which are, it is hoped, of more general interest.

The company accounts analysis

Large companies' annual accounts have been analysed regularly for some 25 years, with results for recent years being published in Business Monitor M3 – Company Finance. The analysis currently covers some 1600 large private sector companies – independent companies or company groups whose main activities are in the United Kingdom. The form of the analysis essentially consists of a balance sheet summary, an income and appropriation account, sources and uses of funds table, some supplementary information and various accounting ratios. The published figures are aggregates with breakdowns for several industry groups and separate figures for overseas controlled companies.

This analysis is now being extended [1] to cover a representative sample of industrial and commercial companies of all sizes. The first stage of this extension has been the construction of two sampling frames. The first, which is described in this article, is a list of the largest 1500 industrial and commercial companies registered in Great Britain; the second is a 1 in 20 sample list of medium and smaller companies. When the second list is completed later this year it will complement the top 1500 and together they will provide a valuable indication of the size distribution, industry classification and certain other details of British industrial and commercial companies and company groups. Northern Ireland registered companies have been excluded.

Size breakdown

Within the top 1500 there are considerable variations in size between companies – they range from a capital employed of just over £4 million to one of £4,650 million, and from a turnover of less than £1 million to £9,540 million.

A list in order of capital employed, such as has been used for tables 1 to 4, gives greater prominence to companies with a high capital employed/turnover ratio, such as property companies, and relegates others such as the distribution trades which have a relatively low capital base.

Tables 1 to 4 show the top 1500 divided into nine size bands according to their capital employed. An approximate definition of these size bands given in the table below.

The size bands were chosen so as to give 250 companies in each, with the exception that the size band for the largest companies was subdivided to give a fuller breakdown. These size bands enable simple comparisons to be made between, say, the top 50 companies and the top 500.

The table below shows that the top 20 companies account for one-third of the capital employed of the top 1500, while the largest 100 account for over 60 per cent. These companies are estimated to account for around 30 per cent and 50 per cent respectively of the capital employed of all industrial and commercial companies, though these estimates are approximate and cannot be confirmed until the first stage of the extension to the company accounts analysis referred to earlier is complete. [2]

Industry detail

Tables 1 to 4 show the distribution of companies by size for each industry. The pattern is very clear; a number of oil, food, property and engineering companies at the upper end, together with some mixed activities. The smaller size bands are dominated by engineering, distribution and other manufacturing (mainly printing, paper and publishing). A large part of the agriculture, engineering, construction, distribution, property and service industries will undoubtedly fall below the top 1500 cut off.

Table 1 shows that over 900 of the top 1500 were mainly engaged in manufacturing industry, with 348 of these companies being in the engineering and allied industries. On the non-manufacturing side wholesale and retail distribution has more than 200 companies. A percentage breakdown of the number of companies between the different size bands is given for each industry in table 2; the distributions are similar for manufacturing and non-manufacturing. Within manufacturing, metal manufacture and textiles, leather and clothing are both concentrated in the smaller size bands, while chemical companies tend to be larger. Outside manufacturing, agricultural construction, and service companies occupy the small to middle range of the size distribution. The largest non-manufacturing companies are mainly involved in the property and oil industries.

Table 3 shows the capital employed of the top 1500 analysed by size group and industry, giving a useful indication of the degree of concentration among the larger companies. Nearly 18 per cent of the top 1500's capital employed is concentrated in the engineering industry, followed by 13 per cent in both oil and gas and in chemicals. This proportion for

[1] Further details of the extended analysis are given in the paper 'Industrial and commercial companies' financial statistics' presented by M. J. Erritt to the Statistics Users Conference on Financial Statistics in November 1977, and the ensuing discussion. A report of the proceedings is available price £4 from the Economic Intelligence Department, Bank of England, London EC2R 8AH.

[2] Readers may also be interested in an article 'The importance of the "top 100" manufacturing companies' published in the August 1976 issue of *Economic Trends*.

Size band	Capital employed £000	Number of companies	Average capital employed per company £m	Total capital employed £m	%	Cumulative %
9	more than 657 525	20	1 411	28 225	33	33
8	between 349 563 and 657 525	30	444	13 238	15	48
7	between 162 548 and 349 563	50	239	11 817	14	62
6	between 56 535 and 162 548	150	94	14 144	17	79
5	between 21 585 and 56 535	250	35	8 686	10	89
4	between 12 125 and 21 585	250	16	4 044	5	94
3	between 8 002 and 12 125	250	10	2 405	3	97
2	between 5 696 and 8 002	250	7	1 697	2	99
1	between 4 085 and 5 696	250	5	1 210	1	100
		1 500	57	85 466	100	

Sources used

The following sources were used to identify the 4000 companies from which the top 1500 were selected:

- ☐ List of 1100 listed and 500 unlisted companies currently analysed in the M3 analysis of company accounts, including companies considered, but rejected at the last (1974) rebasing
- ☐ 'Times 1000' published by Times Books
- ☐ Stock Exchange Year Book
- ☐ 'Britain's Top 1000 Private companies' published by Jordans Dataquest
- ☐ 'Britain's 1000 Foreign Owned companies' published by Jordans Dataquest
- ☐ General Council of British Shipping's List of shipping companies.

Table 1 Number of companies in each size group

	Smallest 1	2	3	4	5	6	7	8	Largest 9	Top 1 500 total (1 to 9)	% of total
TOTAL INDUSTRIAL AND COMMERCIAL COMPANIES	250	250	250	250	250	150	50	30	20	1 500	100
Food drink and tobacco	12	24	20	19	15	11	6	9	2	118	7.9
Chemicals	12	20	18	17	20	12	4	2	1	106	7.1
Metal manufacture	13	8	9	5	6	8	1	1	—	51	3.4
Engineering and allied	57	54	63	57	64	35	8	7	3	348	23.2
Textiles, leather, clothing etc	27	19	10	16	14	2	2	—	1	91	6.1
Other manufacturing	36	35	28	33	23	17	2	3	1	178	11.8
Manufacturing mixed activities	—	1	1	—	5	2	1	—	1	11	0.7
Total manufacturing	157	161	149	147	146	87	24	22	9	903	60.2
Agriculture	6	2	8	8	1	—	—	—	—	25	1.7
Mining and quarrying	1	—	2	1	—	1	1	1	1	—	0.5
Construction	10	18	20	22	14	5	1	—	—	90	6.0
Transport, communication and shipping	8	6	4	7	14	9	2	1	1	52	3.4
Distribution	38	36	36	30	32	21	12	3	—	208	13.9
Property	11	9	9	12	24	16	3	1	3	88	5.9
Services	14	15	19	19	11	6	1	1	—	86	5.7
Oil and gas	2	—	1	1	3	1	3	—	4	15	1.0
Non-manufacturing mixed activities	3	3	2	3	4	4	3	1	2	25	1.7
Total non-manufacturing	93	89	101	103	103	63	26	8	11	597	39.8
Listed on stock exchange	156	172	161	180	171	123	44	27	19	1 053	70.2
Unlisted	94	78	89	70	79	27	6	3	1	447	29.8
Operating wholly in UK	172	178	160	140	134	51	8	1	3	847	56.5
Operating mainly in UK	67	64	75	96	100	84	29	22	10	547	36.5
Operating mainly overseas	4	8	10	9	14	15	12	7	6	85	5.7
Operating wholly overseas	7	—	5	5	2	—	1	—	1	21	1.4
GB-owned companies	208	205	184	200	191	122	45	27	17	1 199	79.9
Overseas-owned companies	42	45	66	50	59	28	5	3	3	301	20.1

Table 2 Percentage of companies in each size group

	Smallest 1	2	3	4	5	6	7	8	Largest 9	Total
TOTAL INDUSTRIAL AND COMMERCIAL COMPANIES	16.7	16.7	16.7	16.7	16.7	9.9	3.3	2.0	1.3	100
Food, drink and tobacco	10.2	20.3	16.9	16.1	12.7	9.3	5.2	7.6	1.7	100
Chemicals	11.3	18.9	17.0	16.0	18.9	11.3	3.8	1.9	0.9	100
Metal manufacture	25.5	15.7	17.5	9.3	11.8	15.7	2.0	2.0	—	100
Engineering and allied	16.4	15.5	18.1	16.4	18.4	10.0	2.3	2.0	0.9	100
Textiles, leather, clothing etc	29.7	20.9	10.9	17.6	15.4	2.2	2.2	—	1.1	100
Other manufacturing	20.2	19.7	15.7	18.5	12.9	9.6	1.1	1.7	0.6	100
Manufacturing mixed activities	—	9.1	9.1	—	45.5	18.1	9.1	—	9.1	100
Total manufacturing	17.4	17.8	16.5	16.3	16.3	9.6	2.7	2.4	1.0	100
Agriculture	24.0	8.0	32.0	32.0	4.0	—	—	—	—	100
Mining and quarrying	12.5	—	25.0	12.5	—	12.5	12.5	12.5	12.5	100
Construction	11.1	20.0	22.2	24.4	15.6	5.6	1.1	—	—	100
Transport, communication and shipping	15.4	11.5	7.7	13.6	26.9	17.3	3.8	1.9	1.9	100
Distribution	18.3	17.3	17.3	14.4	15.4	10.1	5.8	1.4	—	100
Property	12.5	10.2	10.2	13.6	27.4	18.2	3.4	1.1	3.4	100
Services	16.3	17.4	22.1	22.1	12.7	7.0	1.2	1.2	—	100
Oil and gas	13.2	—	6.7	6.7	20.0	6.7	20.0	—	26.7	100
Non-manufacturing mixed activities	12.0	12.0	8.0	12.0	16.0	16.0	12.0	4.0	8.0	100
Total non-manufacturing	15.6	14.9	16.9	17.3	17.3	10.6	4.3	1.3	1.8	100
Listed on stock exchange	14.8	16.3	15.3	17.1	16.2	11.7	4.2	2.6	1.8	100
Unlisted	21.0	17.5	19.9	15.7	17.7	6.0	1.3	0.7	0.2	100
Operating wholly in UK	20.3	21.0	18.9	16.5	15.8	6.0	0.9	0.1	0.5	100
Operating mainly in UK	12.2	11.7	13.7	17.6	18.3	15.4	5.3	4.0	1.8	100
Operating mainly overseas	4.7	9.4	11.8	10.6	16.5	17.6	14.1	8.2	7.1	100
Operating wholly overseas	33.3	—	23.8	23.8	9.5	—	4.8	—	4.8	100
GB-owned companies	17.3	17.1	15.3	16.7	15.9	10.2	3.8	2.3	1.4	100
Overseas-owned companies	13.9	15.0	21.9	16.6	19.6	9.3	1.7	1.0	1.0	100

oil companies is high considering the small proportion of companies (1 per cent) involved. By contrast, construction, with 6 per cent of companies accounts for only 2 per cent of the capital employed. The distribution of capital employed by size bands (as shown in table 4) indicates the extent to which concentration among large companies varies between industries. Size bands 8 and 9 together include all companies with a capital employed in excess of nearly £350 million. The table shows that such companies account for more than 50 per cent of the food, drink, tobacco and chemical industries covered by the top 1500, and similarly account for 81 per cent of mining and quarrying, and 93 per cent of oil and gas.

Other characteristics

At the bottom of tables 1 to 4 additional information is given for each size group. Over 1000 – to be precise 1053 – of the companies were found to be listed on the stock exchange. The remaining unlisted companies are, particularly in the larger size groups, often subsidiaries of overseas companies, and so have an indirect access to market finance in other countries. The vast majority of the companies – around 90 per cent by number but only 70 per cent by capital employed – operate wholly or mainly in the UK. The extent of overseas operations increases with size.

Over 300 of the companies are directly owned by overseas companies, these companies falling evenly through all size groups.

How big?

Capital employed as given in the companies' 1975 consolidated (group) accounts has been used as the indicator of their size. The 1975 accounts are those ending between 1 April 1975 and 31 March 1976. Capital employed was defined as the sum of:

- ☐ Issued share capital
- ☐ Reserves
- ☐ Minority interests
- ☐ Deferred tax
- ☐ Long term loans (including debentures and mortgages)
- ☐ Short term loans
- ☐ Bank loans and overdrafts
- ☐ Net amount owed to other group members

Bank loans and overdrafts and short term loans are included as they form a major part of financing for the smaller companies, which form the second part of the sampling frame.

Capital employed has been chosen as the principal stratification factor for the final selection of companies to be included in the company accounts analysis. It is the best measure of size from the sampling point of view as it directly relates to the balance sheet figures, but suffers at present from the disadvantage of being measured at book values.

The following measures were also examined, but rejected, mainly because they were not sufficiently highly correlated to the financial measures that will ultimately be examined in the company accounts analysis.

1 Turnover. This was also rejected because, under the Companies Acts, independent non-holding companies are not required to disclose turnover if it is below £250,000; thus companies with a small turnover could not have been included. Turnover is a generally useful, and commonly used, measure so it has been extracted for the top 1500 to give the

Table 3 Capital employed in each size group £ million

	Smallest 1	2	3	4	5	6	7	8	Largest 9	Top 1 500 Total (1 to 9)	% of Total
TOTAL INDUSTRIAL AND COMMERCIAL COMPANIES	1 210	1 697	2 405	4 044	8 686	14 144	11 817	13 238	28 225	85 466	100
Food, drink and tobacco	58	155	190	307	519	1 147	1 494	4 157	2 982	11 009	12.9
Chemicals	59	136	172	264	654	1 190	735	810	2 906	6 926	8.1
Metal manufacture	62	54	87	84	227	733	195	478	—	1 922	2.3
Engineering and allied	272	371	593	958	2 342	3 203	1 961	2 913	2 515	15 128	17.7
Textiles, leather, clothing etc	130	125	98	256	519	301	514	—	909	2 852	3.3
Other manufacturing	175	239	269	515	803	1 546	414	1 436	829	6 226	7.3
Manufacturing mixed activities	—	8	11	—	184	203	215	—	925	1 546	1.8
Total manufacturing	756	1 088	1 420	2 384	5 248	8 323	5 528	9 794	11 066	45 607	53.4
Agriculture	29	15	79	121	30	—	—	—	—	274	0.3
Mining and quarrying	5	—	20	17	—	134	301	378	1 666	2 521	3.0
Construction	49	116	193	334	482	553	190	—	—	1 917	2.2
Transport, communication and shipping	39	43	39	123	480	837	372	385	836	3 154	3.7
Distribution	187	247	348	489	1 002	1 755	2 758	1 360	—	8 146	9.5
Property	53	62	87	201	885	1 509	802	397	2 326	6 333	7.4
Services	69	105	187	305	341	529	300	562	—	2 398	2.8
Oil and gas	9	—	12	21	95	116	660	—	10 549	11 462	13.4
Non-manufacturing mixed activities	14	21	20	49	123	388	906	362	1 782	3 665	4.3
Total non-manufacturing	454	609	985	1 660	3 438	5 821	6 289	3 444	17 159	39 859	46.6
Listed on stock exchange	770	1 172	1 612	2 914	5 947	11 425	10 403	12 004	27 558	73 805	86.3
Unlisted	440	525	793	1 130	2 739	2 719	1 414	1 234	667	11 682	13.7
Operating wholly in UK	809	1 285	1 535	2 190	4 804	4 725	2 350	448	2 609	20 755	24.3
Operating mainly in UK	348	356	723	1 621	3 352	8 186	6 583	9 769	11 112	42 050	49.2
Operating mainly overseas	19	56	98	148	466	1 232	2 706	3 021	12 838	20 584	24.1
Operating wholly overseas	34	—	49	85	64	—	178	—	1 666	2 076	2.4

Table 4 Percentage capital employed in each size group

	Smallest 1	2	3	4	5	6	7	8	Largest 9	Total
TOTAL INDUSTRIAL AND COMMERCIAL COMPANIES										
Food, drink and tobacco	0.5	1.4	1.7	2.8	4.7	10.4	13.6	37.8	27.1	100
Chemicals	0.9	2.0	2.5	3.8	9.4	17.2	10.6	11.7	41.9	100
Metal manufacture	3.2	2.8	4.5	4.4	11.8	38.2	10.2	24.9	—	100
Engineering and allied	1.8	2.5	3.9	6.3	15.5	21.2	12.9	19.3	16.6	100
Textiles, leather, clothing etc	4.6	4.4	3.4	9.0	18.2	10.5	18.0	—	31.9	100
Other manufacturing	2.8	3.8	4.3	8.3	12.9	24.8	6.6	23.2	13.3	100
Manufacturing mixed activities	—	0.5	0.7	—	11.9	13.1	13.9	—	59.9	100
Total manufacturing	1.7	2.4	3.1	5.2	11.4	18.3	12.1	21.5	24.3	100
Agriculture	10.6	5.5	28.8	44.2	10.9	—	—	—	—	100
Mining and quarrying	0.2	—	0.8	0.7	—	5.3	11.9	15.0	66.1	100
Construction	2.6	6.1	10.1	17.4	25.1	28.8	9.9	—	—	100
Transport, communication and shipping	1.2	1.4	1.2	3.9	15.2	26.5	11.8	12.2	26.6	100
Distribution	2.3	3.0	4.3	6.0	12.3	21.5	33.9	16.7	—	100
Property	0.8	1.0	1.4	3.2	14.0	23.8	12.7	6.3	36.8	100
Services	2.9	4.4	7.8	12.7	14.2	22.1	12.5	23.4	—	100
Oil and gas	0.1	—	0.1	0.2	0.8	1.0	4.3	—	93.5	100
Non-manufacturing mixed activities	0.4	0.6	0.5	1.3	3.4	10.6	24.7	9.9	48.6	100
Total non-manufacturing	1.1	1.5	2.5	4.2	8.6	14.6	15.8	8.6	43.1	100
Listed on stock exchange	1.0	1.6	2.2	3.9	8.1	15.5	14.1	16.3	37.3	100
Unlisted	3.8	4.5	6.9	9.7	23.4	23.3	12.1	10.6	5.7	100
Operating wholly in UK	3.9	6.2	7.4	10.6	23.1	22.8	11.3	2.2	12.5	100
Operating mainly in UK	0.8	0.8	1.7	3.9	8.0	19.5	15.7	23.2	26.4	100
Operating mainly overseas	0.1	0.3	0.5	0.6	2.3	6.0	13.1	14.7	62.4	100
Operating wholly overseas	1.6	—	2.3	4.1	3.1	—	8.6	—	80.3	100

The problems

An interesting part of the result is the industry analysis and the breakdown between companies operating in the UK and overseas. However, extracting data on these characteristics proved difficult.

Industry classification

Most companies' accounts give a useful breakdown of activity by industry. Where possible an analysis by capital employed or assets was used, but where this was not given, the company was classified by turnover or profits. Industry classification from financial accounts was not straightforward for three reasons.

First many of the companies' descriptions of the different classes of their business did not correspond exactly to the industry groups defined in the standard industrial classification. Some descriptions were vague or technical, while others straddled industries. Secondly, some descriptions related to the end use of the product, rather than to the product itself. Thirdly, many of these large companies' activities were diverse, involving more than one industry – both manufacturing and non-manufacturing in some cases. In this exercise we classified a company to an industry only if at least 40 per cent of its activity was in that industry, but this limit was lowered if the remaining activities were widely spread over other industries. Even so it was necessary to allocate companies with 'mixed activities' to a separate category, though we have divided this into manufacturing and non-manufacturing.

Area of operation

An analysis of turnover by geographical area is required from listed companies under the terms of the Stock Exchange listing agreement. However some of the large unlisted companies also gave it. Where the information was not given, and it was not clear where the company was likely to be operating, we assumed it operated wholly in the UK. The extent of overseas operation was based on turnover being generated overseas, not on the level of exports (which is in any case a UK activity).

results in the turnover analysis table.

2 Number of employees. As with turnover, there is a cut-off at 100 employees below which disclosure is not required by the companies acts. An additional problem is that only the average number of UK employees has to be given, and there are differences between companies in the treatment of part-time employees.

3 Profits. These vary from year to year, and are affected by the economic cycle. Profits also ignore the contribution of the value added by labour.

4 Value added. This is a good general measure of size as it includes the contribution of both capital and labour. There are problems of measurement, but the main problem is that value-added information was not given by many companies in their 1975 accounts.

All the top 1500 companies identified were found to have a capital employed of at least £4,085,000.

Analysis by turnover

Table 5 gives a turnover analysis which is a little less skewed than that for capital employed. The largest 60 companies account for nearly 50 per cent of the total turnover of the top 1500, while only 50 companies account for 50 per cent of capital employed. It is not possible to assess what proportion of the total turnover of all industrial and commercial companies the top 60 represent, as many companies (in particular those with turnover less than £250,000) are not required to disclose turnover in their published accounts. The table also shows that all except 93 of the companies in the top 1500 had at least one subsidiary. As would be expected, all the very largest companies have subsidiaries, while even at the bottom the percentage is 90 per cent. The proportion of overseas-owned companies with subsidiaries is lower for those with less turnover – around 85 per cent for the smallest bands.

Scope of the top 1500

The 1975 accounts of some 4000 companies were examined to identify the largest 1500 companies which satisfied the following criteria.

The companies should be registered in Great Britain, and not consolidated in the accounts of any other company registered in Great Britain. This generally means that subsidiaries of other British companies were excluded, while independent companies and direct subsidiaries of overseas companies were

Table 5 Turnover analysis of the 'top 1500 companies'

Number of companies							Turnover of GB and overseas-owned companies		
	GB-owned		Overseas owned		Total for GB and overseas owned companies	Percentage of total number	£ million	Percentage of total turnover	Cumulative percentage
Turnover band (£ million)	With subsidiaries	Without subsidiaries	With subsidiaries	Without subsidiaries					
Over £1 000	19	—	4	—	23	1.5	49 906	33.7	33.7
£500-£1 000	32	—	5	—	37	2.5	23 931	16.1	49.8
£250-£500	47	—	12	—	59	3.9	20 338	13.7	63.5
£100-£250	121	1	23	7	152	10.1	23 188	15.6	79.1
£50-£100	122	1	42	7	172	11.5	11 684	7.9	87.0
£25-£50	205	7	57	8	277	18.5	9 676	6.5	93.5
£10-£25	370	13	74	24	481	32.1	7 731	5.2	98.7
£3-£10	193	14	25	5	237	15.8	1 747	1.2	99.9
Less than £3	47	5	7	1	60	4.1	84	0.1	100
Total for all size bands	1 156	41	249	52	1 498	100	148 285	100	

Note This table excludes two shipping companies which did not disclose turnover

included. The ownership pattern of companies can be very complex, and it was thought better to consider an inter-related group of companies as a whole rather than each subsidiary separately. Major financial decisions are usually taken at group level, and subsidiaries accounts can be confused by intra-group transactions. So consolidated accounts give the best overall view of a company's performance and position, and increase the coverage in terms of activity.

The companies should fall into the industrial and commercial fields – that is their activities were mainly in the industries listed in table 1. Financial companies and non-profit making bodies were excluded.

The companies should also not be in the process of liquidation.

HOW MUCH by HOW FEW

Data collected in the regular quarterly inquiries into manufacturers' sales on some 4000 commodities have been used to provide a measure which shows the extent to which UK manufacturers' product sales are concentrated in the hands of several manufacturers' – termed concentration ratios. Hugh Phillips and Duncan Gray of the Business Statistics Office describe the choice of concentrations measures used and attempt to draw out some of the more interesting general patterns.

The industrial inquiries carried out by the Business Statistics Office which give a wide range of published summary information of direct use to government departments and industry also provide a wealth of data which can be used for more specialist types of economic analysis.

Concentration ratios obtained from an analysis of the 4000 commodities covered by 1975 quarterly inquiries into manufacturers' sales indicated that there has been a slight tendency for the overall level of concentration to rise through time. This general tendency, however, disguises some quite large rises and falls in concentration for individual product groups. For example between 1968 and 1975 there was a decline in concentration in products in the petroleum products industries and a slight increase concentration in the clothing and textiles industries.

Although it is not possible to publish[1] full details here, specific product groups have been highlighted which have shown the largest increases or decreases in concentration between 1968 and 1975 and also those groups with the highest and lowest absolute ratios in 1975.

Additionally, a recent exercise to produce concentration ratios individually for each of the 4000 commodities in the quarterly inquiries for the year 1976 has been carried out. As might be expected, at this level of detail, the overall level of concentration tends to be high and details cannot be given for almost one half of all products because of the risk of disclosing commercially confidential information about individual companies. Details of this exercise are available on request.

Concentration ratios – a definition

Concentration – in terms of the manufacture for sale of products is, as a general idea, a measure of the degree of how the manufacture of a product is spread across different manufacturers.

These measures are interesting in absolute terms as they indicate the differences between those products which tend to be produced by only a few manufacturers and those produced on a much wider basis. They also give valuable indications of how the manufacture of products becomes more or less concentrated in time.

On this basis there is a large choice of possible measures which may be used. The simplest and most easily interpreted measure is the sales of the five largest enterprises expressed as a percentage of the total sales of the products by UK manufactures. Termed C5, this ratio has been used to provide a measure of concentration published for the 1963 and 1968 censuses of production.

In considering the measure to be used for more recent work, BSO felt that, since it is important to be able to make comparisons in time, this measure should again be used. However, in certain instances, publication of a C5 ratio would, because of for example disclosure of the sales of a sixth enterprise, lead to illegal disclosure. In such cases it may be possible to publish a C6 or C7 ratio, without disclosure. Where there are fewer than five enterprises involved in the sale of a product it is not possible, without breaching the Statistics of Trade Act 1947, to publish the number of enterprises. In such cases, of course C5 is 100 per cent.

The results

In 1977, the data collected for all commodities in the 1976 quarterly inquiries into manufacturers' sales were used to calculate concentration ratios for all products. However, publication of almost half of these ratios proved impracticable because of the risk of disclosing commercially confidential information. Table 1 shows the number of individual products where the concentration ratios could be published. For these, the numbers falling into broad concentration bands is shown.

To be able to publish the maximum amount of information, the individual commodities were 'rolled-up' into the 350 product groups used in the 1968 census of production.[2] Using these products groups allows an almost complete industry wide coverage and forms a use-

[1] Concentration ratios for some 350 or so groups of products have been published previously as part of the results of the old-style detailed censuses of production, the last of which was for 1968. The BSO has recently calculated equivalent figures for 1975 which will be published shortly in a Business Monitor PQ 1006 together with comparable figures for 1963 and 1968. It is planned to publish a further Business Monitor by mid-1979 showing more up-to-date and more detailed figures. This monitor will contain ratios for some 800 product groups for the years 1975, 1976 and 1977.

[2] See table 44 of report 158 of the 1969 census of production.

Table 1 Analysis of C5 for individual product headings in the quarterly sales inquiries: 1976

	No.	%
Number of product headings for which C5 was not publishable	1 683 [3]	44.7
Number of product headings for which C5 ration could be given:	2 081	55.3
of which C5 below		
60%	396	10.5
60-79%	613	16.3
80-89%	470	12.5
Above 90%	602	16.0
All product headings analysed	3 764	100.0

[3] When a heading is not published on its own in the Business Monitor, but is 'rolled up' with one or more other headings separate totals for any of the parts may not be provided under the disclosure rules operated by the BSO. In other cases information cannot be given because fewer than five enterprises contribute to the heading, or there exists the possibility of disclosing data about one or more of the enterprises producing the product concerned.

The authors acknowledge the help of Miss Catriona McKay and Ole Black in preparing this article.

Table 2 Distribution of concentration ratios for 1963, 1968 and 1975 for directly comparible groups of products

Percentage bands within which C5 fell	1963 No.	1963 %	1968 No.	1968 %	1975 No.	1975 %	Rise of fall in % within these bands 63-75	Rise or fall in % within these bands 63-68	Rise or fall in % within these bands 68-75
Less than 60	124	46.1	116	43.1	105	39.1	−7.0	−3.0	−4.0
60-79	69	25.6	59	21.9	69	25.6	0	−3.7	3.7
80-89	26	9.7	39	14.5	45	16.7	7.0	4.8	2.2
90 and above	50	18.9	55	20.5	50	18.6	0	1.9	−1.9
Total for commodity headings analysed	269	100.0	269	100.0	269	100.0	0	0	0

Table 4 Number of product groups falling within given bands of concentration ratio by sic order 1968 and 1975.

		1968 Concentration bands					1975 Concentration bands				
		Less than 60	60-79	80-89	90 or over	Total	Less than 60	60-79	80-89	90 or over	Total
II	Mining and quarrying	3	0	0	2	5	2	1	0	2	5
II	Food, drink and tobacco	7	13	7	16	43	8	11	13	11	43
IV	Coal and petroleum products	0	1	0	6	7	0	3	3	1	7
V	Chemicals and allied industries	8	12	10	8	38	7	13	9	9	38
VI	Metal manufacture	2	3	1	2	8	2	1	2	3	8
VII	Mechanical engineering	22	5	5	3	35	19	8	4	4	35
VIII	Instrument engineering	5	3	1	0	9	6	2	1	0	9
IX	Electrical engineering	4	11	8	7	30	4	9	9	8	30
X	Shipbuilding and marine engineering	1	0	0	0	1	1	0	0	0	1
XI	Vehicles	1	1	0	7	9	2	0	1	6	9
XII	Metal goods not elsewhere specified	11	4	3	1	19	11	5	1	2	19
XIII	Textiles	22	3	2	1	28	17	7	3	1	28
XIV	Leather, leather goods and fur	5	0	0	0	5	3	2	0	0	5
XV	Clothing and footwear	14	0	0	0	14	13	1	0	0	14
XVI	Bricks, pottery, glass, cement etc	4	2	5	7	18	3	4	3	8	18
XVII	Timber, furniture etc	7	0	0	0	7	7	0	0	0	7
XVIII	Paper, printing and publishing	4	1	1	0	6	4	2	0	0	6
XIX	Other manufacturing industries	7	5	1	1	14	8	4	1	1	14
	Total for all headings analysed	127	64	44	61	296	117	73	50	56	296

ful basis for comparisons through time, both in terms of changes between product groups and also in terms of the general change across all industries. No emphasis is given in the following analysis to the identity of the individual product groups because of the large amount of data involved; details will be published in PQ 1006. The main aim of the analysis is to throw light on the trend of C5 and the proportion of product groups falling into each concentration ratio band.

Table 2 shows the distribution of the concentration ratios for the 269 groups for which it has been possible to make direct comparisons between 1963, 1968 and 1975. From the table it can be seen that there is a general slight tendency for the overall level of concentration to rise.

This general upwards drift, disguises some quite large changes – both rises and falls in concentration within individual product groups. Table 3 shows the extent of these rises and falls for comparable groups between 1963-68 and 1968-75.

These distributions are very similar showing, a slightly larger number of products increasing in concentration over time compared with those decreasing. Over half the groups between 1963 and 1968 showed an increase of 3 per cent or more and between 1968 and 1975 over half the groups show an increase of 2 per cent or more.

The actual level and changes in concentration by industry are summarised in table 4 which shows the number of comparable products falling within broad concentration bands by SIC order in 1968 and 1975. The main point of interest in table 4 is that the product groups of the oil-refining industries show a marked decrease in concentration over the period and product groups in the clothing and textile industries show a general increase.

Table 5 gives details for the 10 products displaying the largest increase in ratio and the 10 products displaying the largest decrease. Also shown are the number of enterprises recorded in the quarterly inquiries as manufacturing the group of products involved and also the total sales these product groups recorded in 1975.

Table 3 Analysis of changes in C5 1963-68-75

Band of changes in percentage points	1963-68 No.	1963-68 %	1968-75 No.	1968-75 %
−20.00 or more	2	0.7	0	0
−19.9 to −15.0	0	0	8	2.7
−14.9 to −10.0	5	1.6	16	5.4
−9.9 to −5.0	20	6.5	30	10.1
−4.9 to −2.0	32	10.4	34	11.5
−1.9 to −0.1	34	11.2	25	8.5
0 to 1.9	41	13.4	36	12.2
+2.0 to +4.9	54	17.6	63	21.3
+5.0 to +9.9	54	17.6	46	15.5
+10.0 to 14.9	32	10.4	23	7.8
+15.0 to 19.9	15	4.9	6	2.0
More than 19.9	18	5.9	9	3.0
Total of commodity headings analysed	307	100.0	296	100.0

Table 6 identifies those product groupings with a 100 per cent concentration ratio. Table 7, in contrast, lists the product grouping where concentration ratios are below 30 per cent.

Sources of data and terms

Data used to compile the ratios have been collected in the quarterly inquiries from establishments with 25 or more employees. The 'establishment' is the basic statistical unit in UK statistics for manufacturing industries and is defined as the smallest unit which can provide the data required for an economic census. For certain products (notably jewellery, precious metals and furs) smaller establishments produce goods with a high sales value and their exclusion must be borne in mind when considering the absolute value of concentration for such products. Further information on the relative importance of smaller establishments by industry can be obtained from annual census of production reports.

The data are the value of sales of the group of products by the establishment. Data used for concentration ratio calculations is based solely on sales of goods manufactured by the establishment and does not include goods merchanted or factored. Data for 'establishments' are aggregated to the level of an 'enterprise' which is defined as one or more establishments under common ownership or control and represents the largest legal unit which owns or

Table 5 Products or product groups with greatest increases/decreases in concentration ratios between 1968 and 1975

Product or product group	1975 Total sales (£000)	1975 Number of enterprises	1975 Concentration ratio	1968 concentration ratio	Increase in concentration ratio between 1968 and 1975
Increases					
Limestone and dolomite	69 155	49	69.8	37.1	32.7
Ready-mixed concrete	115 644	67	79.7	[2] 50.5	29.2
Single yarn of cotton and man-made fibres	173 410	44	75.6	50.3	25.3
Sanitary ware	. . [1]	15	91.8	66.9	24.9
Wool and other animal hair	17 067	26	72.3	50.0	22.3
Phenols and their salts	27 953	6 [2]	10.0	78.8	21.2
Other household textiles and handkerchiefs	53 711	75	47.4	26.6	20.8
Leather undressed	23 761	53	76.3	55.6	20.7
Refrigerators and freezers	. . [1]	7 [3]	100.0	79.7	20.3
Ferro-alloys	15 621	7 [3]	100.0	80.5	19.5
Decreases					
Aviation and motor spirit	1 266 057	11	77.8	97.5	19.7
Ethanol, potable spirits	150 893	20	77.0	96.6	19.6
Gramophone records	90 876	15	77.7	95.4	17.7
Gas/diesel oil	1 187 296	16	76.3	93.6	17.3
Wallpaper	106 695	22	74.1	89.7	15.6
Vegetables, quick frozen	123 670	29	81.7	97.1	15.4
Bitumen	80 215	8	81.9	97.1	15.2
Other parts and accessories of cars (including bodies)	331 274	188	48.1	63.2	15.1
Cutlery	54 146	113	56.0	70.9	14.9
Leathercloth, oil baize	67 569	25	59.8	73.9	14.1

[1] The sales figure for this heading may not be disclosed. [2] The concentration ratio for this heading in 1975 is C6 to avoid disclosure. [3] The concentration ratio for this heading in 1975 is C7 to avoid disclosure.

controls the activities of each 'establishment'. However, it is not possible to make allowances when aggregating for possible sales between 'establishment's' in the same 'enterprise'. So the sales data for some 'enterprises' may contain a slightly higher estimate of sales than sales by the 'enterprise' in the final market. Information about the relationships between 'establishments' and 'enterprises' is held on the register of manufacturing establishments at the BSO. This is continuously maintained and updated by information from Companies House and other sources.

Concentration by product or industry – the difference

Measures of concentration within manufacturing industries by enterprises derived from the annual censuses of production differ from measures of product concentration in a number of important aspects.

The annual census of production measure gives for employment, sales and work done, wages and salaries and other variables, the percentage of each attributable to the five largest enterprises in the industry, defined in terms of employment.

Enterprises are allocated to that industry where the greatest sale of the products lies.

The most important point to bear in mind, in comparing these ratios with ratios of the product level, is that the size criterion used is employment, whereas at the product level it is the sales of the product or product group which determines the size of the enterprise in the period. Because a large manufacturing enterprise may well manufacture products in more than one industry, a high concentration ratio at the industry level may not necessarily imply a high concentration in the manufacture of particular products within that industry.

Further information

Because it is a fairly recent year and because of the importance of that year as a potential base for many economic indicators, first priority has been given to producing, concentration ratios for 1978 directly comparable with those produced in the 1968 census report. The product groups available in the quarterly inquiries into manufacturers' sales, in 1975, which form the basic data for this calculation, differ to some extent in coverage and description from those available in the 1968 censuses, but these have been matched as closely as possible.

A Business Monitor, PQ 1006, showing for these groups comparable ratios for 1963, 1968 and 1975 will be published shortly. In most cases, where the number of enterprises making and selling commodities in a group is greater than five, it will be possible, without risk of disclosing information for an individual company, to publish the number of enterprises returning sales to this group in addition to the ratio C5.

Because the product groupings used in the 1968 census do not completely cover all products included in the quarterly inquiries, and because since 1968 certain products and groups have become more or less important, it has been decided that a new more complete and more detailed set of groups will be used for future publications. It is therefore intended to produce ratios for about 800 or so groups of commodities. It is hoped to publish a Business Monitor on the basis of these groupings, covering the years 1975, 1976 and 1977 by mid-1979. Because ratios generally do not change quickly through time, further monitors will be published at two-yearly or at less frequent intervals.

Table 6 Product and product groups with 100% concentration

Product or product group	Number of enterprises contributing to heading
Cigars	..[1]
Plaster goods	..[1]
Salt	5
Titanium alloys and manufactures	5
Sewing machines	5
Blacks, mineral and carbon	6
Cellulose derivatives	6
Phenols and phenolic salts	6
Margarine	7
Cigarettes	7
Petroleum feedstocks for chemical plants	7
Alyhatic hydrocarbons	7
Ferro alloys	7
Refrigerators and freezers	7
Electric washing machines	7
Aircraft complete and air frames	7

[1] Less than five enterprises.

Table 7 Product/product groups with low concentration ratios (below 30 per cent)

Product or product group	C5 concentration ratio
Weatherproof outerwear	29.8
Recorders, controllers and other measuring equipment	29.2
Dental, medical, surgical and veterinary appliances and equipment	29.0
Infant wear	28.8
Office, school and other furniture	28.4
Men's and boys' tailored outerwear	28.3
Precast concrete goods	27.6
Upholstered furniture	27.6
Woven wool and woollen fabrics	26.8
Plastics: domestic, catering and furnishing goods	25.4
Metal furniture	24.9
Manufactures of leather and leather substitutes	24.5
Fluid power equipment	24.1
Conveyors, aerial ropeways, other lifting and winding devices	24.0
Wooden containers and baskets	21.9
Domestic furniture, wholly or partially made of wood	21.7
Air distribution and diffusion equipment	20.6
Engineers' small tools	20.2
Women's and girls' tailored outerwear	17.7
Shop and office fittings	16.1
Women's and girls' light outerwear	16.0
Plastics: components, accessories and semi-manufactured goods	13.6

Inquiries: Business Statistics Office, Room 3.4, Cardiff Road, Newport, tel. (0633) 56111 ext. 2319.

Patents recorded 'licences of right'

Under section 46 of the Patents Act 1977 the register was noted 'licences of right' in respect of the following patents on the date specified:

1 November 1978

983200 Ford Motor Co Ltd
Planetary gear transmission
1026827 Ford Motor Co Ltd
Tractors
1028889 Ford Motor Co Ltd
Automatic change speed transmission
1054517 Ford Motor Co Ltd
Distributors for internal combustion engines
1071020 Ford Motor Co Ltd
Motor vehicle rear suspensions
1117288 Ford Motor Co Ltd
Motor vehicle control pedal mechanism
1135404 Ford Motor Co Ltd
Electrodeposition
1135405 Ford Motor Co Ltd
Bath composition for electrode position
1135406 Ford Motor Co Ltd
Bath composition for electro-deposition
1141578 Ford Motor Co Ltd
Method of forming relatively straight lengths of metal into elongated members
1143686 Ford Motor Co Ltd
Method for improving operational stability of electrocoating bath
1145138 Ford Motor Co Ltd
Clutch
1147109 Ford Motor Co Ltd
Method of electrical deposition of paint
1159833 Ford Motor Co Ltd
Clutch gearbox assembly
1165429 Ford Motor Co Ltd
Cable actuating aid and tension regulating mechanism
1173659 Ford Motor Co Ltd
Method of anchoring of a metallic member to plastics
1175906 Ford Motor Co Ltd
Offset backhoes
1181759 Ford Motor Co Ltd
Fluid motor construction
1183020 Ford Motor Co Ltd
A semi-automatic transmission mechanism
1187729 Ford Motor Co Ltd
Disengageable clutch disc coupling
1190159 Ford Motor Co Ltd
Shock absorber and air spring assembly
1192057 Ford Motor Co Ltd
Remote control mechanisms
1233495 Ford Motor Co Ltd
Motor vehicle internal shoe drum brakes
1237524 Ford Motor Co Ltd
Position to voltage transducer
1238604 Ford Motor Co Ltd
Dynamoelectric machine armature
1241478 Ford Motor Co Ltd
Automotive vehicle condition indicator
1274900 Ford Motor Co Ltd
A method of mating articles of plastics material
1311397 Ford Motor Co Ltd
An exhaust gas recirculation control mechanism for an internal combustion engine
1324720 Ford Motor Co Ltd
Automatic change speed transmission
1324803 Ford Motor Co Ltd
Air cleaners for internal combustion engines
1328009 Ford Motor Co Ltd
Process for the preparation of non-aqueous dispersions of film-forming polymers
1328010 Ford Motor Co Ltd
Preparation of non-aqueous dispersions of thermosetting film-forming copolymers
1331649 Ford Motor Co Ltd
Power transmission mechanism
1332070 Ford Motor Co Ltd
Graded polymer particles
1335935 Ford Motor Co Ltd
Variable reluctance motor having sine pulse controller
1350101 Ford Motor Co Ltd
Valve mechanism for an internal combustion engine
1354060 Ford Motor Co Ltd
Power transmission mechanism
1354820 Ford Motor Co Ltd
Planetary gear system
1356459 Ford Motor Co Ltd
Battery terminal assembly
1356799 Ford Motor Co Ltd
Carburetor throttle valve positioner
1358087 Ford Motor Co Ltd
Signal producing apparatus for a variable reluctance motor
1360410 Ford Motor Co Ltd
Motor vehicle having rear view mirror
1360979 Ford Motor Co Ltd
Planar air gap variable reluctance rotating machine
1363980 Ford Motor Co Ltd
Planar air gap variable reluctance rotating machine
1364580 Ford Motor Co Ltd
Carburettor
1376088 Ford Motor Co Ltd
Improvements in and relating to the preparation of powder coating compositions
1381508 Ford Motor Co Ltd
Modified thermo-setting resin compositions
1384367 Ford Motor Co Ltd
Energy absorbing steering column for motor vehicles
1385628 Ford Motor Co Ltd
Energy absorbing steering column
1386169 Ford Motor Co Ltd
Electron accelerator with control yoke
1389600 Ford Motor Co Ltd
Steering column and gearshift lever assembly
1391379 Ford Motor Co Ltd
Suspension in a motor vehicle

1392149 Ford Motor Co Ltd
Motor vehicle having energy absorbing steering column
1396149 Ford Motor Co Ltd
Internal combustion engine with control of the carburettor idling system
1402406 Ford Motor Co Ltd
Actuating mechanism for transmitting a force from a first movable member to a second movable member
1402929 Ford Motor Co Ltd
Torque sensing clutch for use in a variable ratio power transmitting mechanism
1407600 Ford Motor Co Ltd
Carburettor having an automatic choke
1408628 Ford Motor Co Ltd
Automatic power transmission
1410847 Ford Motor Co Ltd
Carburettor controlled servo system
1411158 Ford Motor Co Ltd
Carburettor for an internal combustion engine
1412269 Ford Motor Co Ltd
Louver assembly
1412900 Ford Motor Co Ltd
Motor vehicle having mounting means connecting a steering gear to a vehicle frame component
1413215 Ford Motor Co Ltd
Gas turbine engine control system
1414206 Ford Motor Co Ltd
Steering gear actuator, particularly for motor vehicles
1416606 Ford Motor Co Ltd
Determination of oxygen content of molten metal
1417310 Ford Motor Co Ltd
Valve stem seal and lubricator for an internal combustion engine
1419602 Ford Motor Co Ltd
A carburettor
1420032 Ford Motor Co Ltd
End plate and bearing assembly for a dynamoelectric machine
1428579 Ford Motor Co Ltd
Walking beam apparatus
1434423 Ford Motor Co Ltd
Actuating mechanism for transmitting movements from one member to another
1435479 Ford Motor Co Ltd
Conversion of polyurethane foam
1435480 Ford Motor Co Ltd
Conversion of polyurethane foam
1436817 Ford Motor Co Ltd
Recovery of methyl methacrylate and polymethyl methacrylate
1441598 Ford Motor Co Ltd
Vehicle side impact protection
1441696 Ford Motor Co Ltd
Rotary mechanism
1455454 Ford Motor Co Ltd
Hydrolysis of polyurethane foam
1456055 Ford Motor Co Ltd
Bearing assembly
1456251 Ford Motor Co Ltd
Hydrolysis of polyurethane foam
1456252 Ford Motor Co Ltd
Hydrolysis of polyurethanes
1456654 Ford Motor Co Ltd
Reinforced polyamides
1460955 Ford Motor Co Ltd
Internal combustion engine
1460955 Ford Motor Co Ltd
Motor vehicle suspension system
1044735 Sumitomo Chemical Co Ltd
Method for producing alkylaluminum compounds
1131906 Sumitomo Chemical Co Ltd
Method of sunthesising urea
1170048 Sumitomo Chemical Co Ltd
Process for preparing a – olefin mixtures
1199701 Sumitomo Chemical Co Ltd
Process for producing isoprene
1202089 Sumitomo Chemical Co Ltd
Continuous production of organoaluminium compound
1239262 Sumitomo Chemical Co Ltd
A method for producing 5-isopropylidene-2-norbornene
1264285 Sumitomo Chemical Co Ltd
Process for selective methylation of phenols
1291739 Sumitomo Chemical Co Ltd
Process for producing 2-alkylidene norbornane derivatives
1294985 Sumitomo Chemical Co Ltd
Aluminium plating process
1305009 Sumitomo Chemical Co Ltd
Process for activating aluminium or an alloy thereof
1308124 Sumitomo Chemical Co Ltd
Continuous process for producing alkylaluminium compounds
1374900 Sumitomo Chemical Co Ltd
Method of producing amides
1410339 Sumitomo Chemical Co Ltd
Process for the preparation of amides
1410340 Sumitomo Chemical Co Ltd
Esterification process
1421257 Sumitomo Chemical Co Ltd
Process for selective methylation phenols
1445864 Sumitomo Chemical Co Ltd
Production of polyamides
1449339 Sumitomo Chemical Co Ltd
Production of ketones
1502340 BBC Brown Boverie and Co Ltd
Controllable electrochromic display cell
1502451 BBC Brown Boverie and Co Ltd
Gas-dynamic-pressure exchanger
1503378 BBC Brown Boverie and Co Ltd
Improved power transistor drive circuit
1505574 BBC Brown Boverie and Co Ltd
Cerium misch-metal/cobalt magnets
1505691 BBC Brown Boverie and Co Ltd
Electric cremation oven
1391339 Centre Scientifique et Technique Du Batiment and Compagnie Electro-Mecanique
Improvements in or relating to methods of controlling open-cycle systems
1395187 Centre Scientifique et Technique Du Batiment and Compagnie Electro-Mecanique
Improvements in or relating to methods of regulating – the humidity of air circulating in buildings
1329200 White Castle System Inc
Food conveying drum for a deep fat frying machine
1388101 Centre European De Recherches Mauvermay
Substituted butanic esters
1500349 Alan Pearcey
Wall mounted holder

Any person who claims that the proprietor of the patent is, and was at the time of the entry, precluded by a contract in which the claimant is interested from granting licences under the patent may, within three months after the making of the relevant entry, apply to the Comptroller on Patents Form 31/77 for cancellation of the entry.

I. J. G. Davis, Comptroller

Domestic furniture: deliveries and orders in September

Domestic furniture deliveries for September are provisionally estimated at £90.8 million (at current prices), which gives a seasonally adjusted index of deliveries for the month of 118. The average for the latest three months, July to September, is 114, which is 3.2 per cent higher than the revised figure for the previous three months (April to June), and 17.4 per cent higher than the figure for the same period in 1977.

The index of orders-on-hand, on a seasonally adjusted basis, yields a provisional figure of 80 for September. The average for the three months July to September is 75 which is a rise of 6.7 per cent from the revised figure for the previous three months, and 14.6 per cent higher than the corresponding period last year.

Inquiries: Department of Industry, Trade and Prices and Consumer Protection, Economics and Statistics Division 3B, Room 107, Dean Bradley House, 52 Horseferry Road, London SW1, tel. 01-212 8662.

Note
The indices are given on 1975 constant price basis, with 1975 = 100. When price increases are large, the problems associated with revaluation to constant prices become more acute. Thus relative accuracy with which volume changes have been measured is likely to have been reduced in times of high inflation.

	Deliveries £m current values	Index of deliveries (1975 = 100) Unadjusted	Index of deliveries (1975 = 100) Seasonally adjusted	Index of orders on hand (end of month or centred average 1975 = 100) Unadjusted	Index of orders on hand (end of month or centred average 1975 = 100) Seasonally adjusted
1974	430.7		93		92
1975	578.9		100		100
1976	660.2		101		84
1977	748.1		99		70
1977					
1st qtr	197.1 r	111	105	85	79
2nd	166.7 r	90	92	65	67
3rd	167.5 r	87	97	62	66
4th	216.8 r	109	102	69	67
1978					
1st qtr	219.9 r	107	102	75	70
2nd	224.0 r	107	110	68	71
3rd	221.1 r	103	114	71	75
1977					
Jan	60.4 r	107	107	87	81
Feb	64.9 r	116	106	85	78
Mar	71.8 r	111	104	75	73
Apr	56.0 r	94	96	66	68
May	60.8 r	97	99	61	65
Jun	49.9 r	79	82	58	65
Jul	47.6 r	79	98	60	65
Aug	51.9 r	77	96	63	66
Sep	67.9 r	106	96	65	66
Oct	72.9 r	114	101	66	66
Nov	78.5 r	117	102	74	69
Dec	65.4 r	96	103	68	65
1978					
Jan	70.5 r	102	103	78	72
Feb	72.5 r	115	104	77	71
Mar	77.0 r	105	99	74	71
Apr	75.5 r	117	119	70	72
May	72.7 r	98	100	67	70
Jun	75.8 r	106	111	61	68
Jul	60.6 r	88	109	66	72
Aug	69.8 r	91	113	76	79
Sept	90.8 p	129 p	118 p	79 p	80 p
Averages					
Apr-Jun 1978			110		71
Jul-Sep 1978			114		75
Percentage change			+3.2		+6.7
Jul-Sep 1977			97		66
July-Sep 1978			114		75
Percentage change			+17.4		+14.6

r Revised. p Provisional.

Vehicle production: provisional estimates for October

Provisional estimates of vehicle production in the United Kingdom in the four weeks ending 28 October 1978 are shown below. More detailed production figures are due to be published on 23 November.

Inquiries: 01-212 0788.

Thousands

	No. of weeks	Passenger cars Recorded	Passenger cars Seasonally adjusted (monthly average)	Commercial vehicles Recorded	Commercial vehicles Seasonally adjusted (monthly average)
1975	52	1 268	106	380.7	31.7
1976	53	1 333	111	372.1	31.0
1977	52	1 316	110	398.3	33.2
1977					
Jan	4	120	121	34.3	36.7
Feb	4	96	99	33.2	33.3
Mar	5	115	97	42.0	34.2
Apr	4	113	122	29.5	32.2
May	4	140	122	38.9	35.9
Jun	5	117	108	32.8	29.2
Jul	4	75	105	27.0	33.4
Aug	4	79	102	23.5	34.3
Sep	5	116	120	35.3	33.9
Oct	4	103	103	34.1	33.3
Nov	4	113	104	31.0	29.9
Dec	5	128	116	36.5	32.1
1978					
Jan	4	111	112	31.1	33.5
Feb	4	108	112	30.7	31.1
Mar	5	139	126	41.9	36.4
Apr	4	119	121	35.0	36.3
May	4	122	106	37.8	35.4
Jun	5	122	111	39.5	34.5
Jul	4	65	92	27.2	34.2
Aug	4	89	115	21.2	31.1
Sep	5	107	112	33.8	32.7
Oct	4	80	81	25.0	24.6
May-Jul 1978			103		34.7
Aug-Oct 1978			102		29.4
Percentage change			−1		−15

Letters to the editor

Letters to the editor should be addressed to the Editor, *Trade and Industry*, Room 437, 1 Victoria Street, London SW1H 0ET, and *not* to HMSO.

Retail sales: provisional estimate for October

Volume

The provisional estimate of the seasonally adjusted index of the volume of retail sales in October is 109½ (1971 = 100).

The estimate suggests that trade has continued at about the same level as in September when it was below the high level of sales in July and August but above the level of earlier months of this year.

In the three months August to October the volume of sales was ½ per cent higher than in the previous three months. During the first 10 months of 1978 the average level of trade was about 4½ per cent above the annual average for 1977.

Value

Based on non-seasonally adjusted data, the provisional estimate of the value of total retail sales in October was 14 per cent higher than in October 1977. In the first 10 months of 1978, the average value of sales was 14 per cent higher than in the corresponding period of 1977.

Notes

The volume index is given to the nearest half per cent. The percentage increase in value compared with a year earlier is given to the nerarest whole number.

Estimates are based on early returns to the monthly inquiry. These returns cover approaching one half, by turnover, of information available at the final stage. Over the last 12 months the average difference (ignoring sign) between provisional and final estimates was 0.6 per cent. However, as with all estimates based on partial data, caution must be exercised in interpreting a single month's figures.

When using the volume figures, it should be borne in mind that, when price increases are large, the various problems associated with revaluation of the value series to constant prices become more acute. Thus, the relative accuracy with which volume changes have been measured is likely to have been reduced in recent periods.

The value estimates are compiled inclusive of VAT, and will, therefore, reflect changes in the rates of VAT. The volume estimates, however, are not affected by these changes since the retail price indices used to 'deflate' the value data are themselves inclusive of VAT.

The seasonally adjusted series include, where appropriate, adjustments for the timing of holidays and adjustments to make allowances for the inclusion of an extra week in the January 1975 trading period. No adjustments are made to the non-seasonally adjusted data.

The final figures for October will be published in a press notice on Monday, 4 December 1978.

Inquiries: 01-215 3705.

Retail sales: volume and value

	Volume seasonally adjusted index (1971 = 100)		Value not seasonally adjusted – percentage change compared with a year earlier
1977		**1977**	
2nd qtr	102.5	2nd qtr	+13
3rd	104.3	3rd	+15
4th	104.4	4th	+13
1978		**1978**	
1st qtr	106.3	1st qtr	+13
2nd	108.0	2nd	+15
3rd	110.8 p	3rd	+14
1977		**1977**	
July	**104.8**	**July**	+16
Aug	104.7	Aug.	+16
Sept	103.5	Sept.	+14
Oct	102.7	Oct	+12
1978		**1978**	
July	**111.4**	**July**	+15
Aug	111.8	Aug	+15
Sept	109.5	Sept	+13
Oct	109½ p	Oct	+14 p

p Provisional.

Catering trades' turnover in the third quarter

Catering turnover, at current prices and after seasonal adjustment, was five per cent higher in the third quarter of 1978 compared with the second quarter.

Recent percentage increases compared with corresponding quarters a year earlier (at current prices but not seasonally adjusted) for the main kinds of business are: compared with the third quarter of 1977, catering turnover in the third quarter of 1978 increased by 12 per cent overall; the increases recorded for each kind of business were: licensed hotels and holiday camps 18 per cent; restaurants, cafes and fish and chip shops 12 per cent; public houses 10 per cent and canteens 11 per cent.

	All caterers	Licensed hotels and holiday camps	Restaurants, cafes and fish and chip shops	Public houses	Canteens
1977					
1st qtr	14	21	14	12	18
2nd	10	22	10	7	13
3rd	11	19	9	8	12
4th	12	20	10	11	10
1978					
1st qtr	12	17	10	12	7
2nd	12 r	17 r	12 r	9	13 r
3rd	12	18	12	10	11

The Easter bank holiday fell entirely in the second quarter in 1977 and entirely in the first quarter in 1978. r = Revised figure.

Inquiries: 01-215 3177.

Turnover of all caterers, seasonally adjusted

Index numbers of turnover per week [1]
Value at current prices (turnover in 1969 = £2,533 million) — Great Britain 1969 = 100

	Year	1st qtr	2nd qtr	3rd qtr	4th qtr
1969	100	97	100	102 *	103
1970	108	105	108	109	112
1971	118	115	117	119	122
1972	131	125	128	133	138
1973	148	142	146	150	153
1974	170	159	166	173	180
1875	201	187 *	198	208	210
1976	230	215	229	237	237
1977	256	245	253	263	265
1978		274	282 r	295	

[1] Turnover includes VAT; the quarterly periods consist of 13 weeks except * which are of 14 weeks. The third quarter 1978 period was the 13 weeks from July 2 1978 to September 30 1978; the third quarter 1977 period was the 13 weeks from July 3 1977 to October 1 1977.

Housing report for September

Housebuilding

In September 24 500 houses and flats were started in Great Britain compared with 28 300 in September 1977. Completions in September numbered 22 900 compared with 28 300 in September the previous year.

Taking three month totals to reduce the effect of month-to-month fluctuations, and discounting the normal seasonal movements, total starts in the third quarter of 1978 were 10 per cent down on the previous quarter, April to June, and 9 per cent lower than the third quarter of 1977. Total completions were 4 per cent down on the previous quarter and 11 per cent lower than a year ago.

In the public sector, making similar comparisons, starts were 13 per cent down on the previous quarter and 25 per cent lower than a year ago, while completions were one per cent down on the previous three months and 22 per cent lower than a year earlier.

Private sector starts were 8 per cent down on the previous quarter but 6 per cent higher than a year earlier, while completions were 7 per cent down and 2 per cent higher respectively.

Slum clearance for third quarter

It is provisionally estimated that 8000 dwellings were demolished or closed under slum clearance action in England in the third quarter of 1978 compared with 9700 in the previous three month and 8600 in the third quarter of 1977.

Inquiries: Department of the Environment, 2 Marsham Street, London SW1P 3EB, tel. 01-212 3434.

Housing performance Great Britain [1]
September 1978 — Thousands of dwellings

	Starts			Completions		
	Public	Private	Total	Public	Private	Total
1969	176.6	166.8	343.5	185.1	181.7	366.8
1970	153.8	165.1	318.9	180.1	170.3	350.4
1971	136.9	207.4	344.3	158.9	191.6	350.6
1972	123.0	228.0	350.9	122.8	196.5	319.3
1973	112.8	215.7	328.5	107.5	186.6	294.1
1974	146.1	105.9	252.1	128.6	140.9	269.5
1975	173.8	149.1	322.9	162.3	150.8	313.0
1976	170.8	154.7	325.4	163.0	152.2	315.2
1977	132.1	134.8	266.9	162.5	140.3	302.7
Unadjusted						
1977						
3rd qtr	37.2	39.1	76.3	41.9	35.6	77.4
4th	30.5	31.4	61.9	44.9	38.1	83.0
1978						
1st qtr	23.0	30.4	53.4	31.3	35.3	66.6
2nd	34.8	46.5 r	81.2 r	33.4	38.5 r	72.0 r
3rd	27.6	40.7	68.4	32.2	35.6	67.9
1978						
Apr	10.7	14.7	25.4	10.4	12.2	22.6
May	11.4	13.8	25.1	11.6	12.5	24.0
Jun	12.7	18.0 r	30.7 r	11.5	13.9 r	25.4 r
Jul	10.3	13.3	23.6	12.0	12.1	24.2
Aug	8.4 r	11.9	20.3 r	9 8	11.0 r	20.8 r
Sep	9.0	15.5	24.5	10.4	12.5	22.9
1977						
Jan-Sep	101.6	103.4	205.0	117.6	102.1	219.7
1978						
Jan-Sep	85.4	117.6	203.0	96.9	109.4	206.4
Seasonally adjusted						
1977						
3rd qtr	34.6	35.3	69.9	41.8	34.8	76.6
4th	34.5	34.9	69.4	42.9	36.0	78.9
1978						
1st qtr	26.4	35.1	61.5	32.9	38.0	70.9
2nd	29.8	40.6 r	70.4 r	32.9	38.3 r	71.2 r
3rd	26.0	37.4	63.4	32.7	35.5	68.2
1978						
Apr	10.0	13.5	23.5	10.8	12.4	23.2
May	9.9	12.2	22.1	11.3	12.5	23.8
Jun	9.9	14.9 r	24.8 r	10.8	13.4 r	24.2 r
Jul	9.6	12.0	21.6	12.0	12.5	24.5
Aug	7.8	11.1 r	18.9 r	10.3	10.9	21.2
Sep	8.6	14.3	22.9	10.4	12.1	22.5
1977						
Jan-Sep	97.6	99.9	197.5	119.6	104.3	223.9
1978						
Jan-Sep	82.2	113.1	195.3	98.5	111.8	210.3

[1] Scottish figures are estimates and may be subject to small revisions. r Revised.

Wholesale price indices in October

Output prices

The provisional price index for the homes sales of manufactured products increased by ¼ per cent in October to 156.4 (1975=100).

The index for manufactured products other than food, drink and tobacco rose by ¾ per cent. The most significant contributions were made by the paper, printing and publishing and the mechanical engineering sectors. The index rose by 1¾ per cent in the latest three months.

Higher prices for glass containers were responsible for most of the 2¼ per cent increase in the index for the pottery and glass industries. This index has increased by 3½ per cent in the latest three months.

More than half of the 1¾ per cent increase in the index for the paper industries was accounted for by higher prices for both corrugated fibreboard packing cases and paper sacks.

More than half of the 1½ per cent increase in the index for the instrument engineering industries was accounted for by higher prices for scientific and industrial instruments.

Widespread price rises were responsible for the increases of 1 per cent and ½ per cent in the indices for mechanical and electrical engineering industries respectively.

Higher prices for women's and girls' light outerwear accounted for more than half of the 1 per cent increase in the index for the clothing and footwear industries and for most of the increase in the index for the made-up clothing industries.

More about wholesale price indices

General inquiries and tables 1, 1a and 2	**01-215 3544**
Table 3	**01-215 3073**
engineering	**01-215 3549**
chemicals, steel, building materials, etc	**01-215 5216**
textiles, clothing, timber, paper, etc	**01-215 3548**
Tables 4 and 5	**01-215 3173**

Correspondence: Departments of Industry, Trade and Prices and Consumer Protection, Economics and Statistics Division 4, Room 249, Sanctuary Buildings, Great Smith Street, London SW1P 3DB

Table 1 Price index numbers of materials and fuel purchased

1975 = 100

1968 SIC Orders or MLH Numbers		1977		1978			1977	1978							
		3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr p	Oct	Mar	Apr	May	Jun	Jul	Aug	Sep p	Oct p
Orders III to XIX	Materials and fuel purchased by manufacturing industry:	146.5	142.2	140.2	146.3	144.9	143.7	142.0	145.1	146.8	147.0	145.8	144.2	144.8	145.7
	Materials [1]	147.0	142.1	139.5	145.5	143.8	143.8	141.4	144.1	146.0	146.3	144.8	143.0	143.7	144.7
	Coal (except for carbonising), gas and electricity	142.8	143.0	145.5	152.9	152.8	142.9	147.0	152.9	152.8	152.9	152.9	152.8	152.8	152.8
Orders IV to XIX	Materials and fuel purchased by manufacturing industry, other than food, drink and tobacco manufacturing industries:	143.6	139.1	134.2	141.5	139.2	141.2	136.5	140.2	142.3	142.1	139.7	138.8	139.1	140.2
	Materials [1]	143.8	138.4	132.1	139.3	136.6	140.9	134.5	137.8	140.2	140.0	137.2	136.2	136.4	137.4
Order III	Materials and fuel purchased by the food, drink and tobacco manufacturing industries	149.0	147.5	151.1	155.2	156.4	147.3	152.0	153.6	155.4	156.6	157.6	155.3	156.3	157.6
	Materials and fuels purchased by selected broad sectors of industry														
211 to 229	Food manufacturing industries:	151.8	149.6	153.7	157.0	157.2	149.5	154.7	156.0	157.0	158.0	158.8	155.2	157.6	159.0
	Materials	151.8	149.6	153.7	157.0	157.3	149.4	154.8	156.0	157.0	158.1	159.0	155.2	157.7	159.1
	Fuel [2]	151.3	150.8	152.1	155.9	155.9	150.7	152.4	155.9	155.9	155.9	155.9	155.8	155.9	155.9
211 to 229 (excluding MLH 219)	Food manufacturing industries (excluding animal and poultry foods)	152.1	149.9	153.8	156.2	157.5	149.9	154.6	154.9	156.4	157.4	158.6	155.6	158.2	159.4
Order V	Chemicals and allied industries	148.2	148.4	149.0	153.4	153.2	148.3	150.1	153.0	153.5	153.6	153.2	152.9	153.5	155.0
311 and 312	Steel industries	142.2	142.1	141.2	145.7	146.7	142.9	143.0	145.0	145.9	146.2	146.0	146.4	147.8	148.7
321 to 323	Non-ferrous metals industry	140.5	140.1	135.5	142.3	146.6	141.2	136.3	140.3	142.5	144.1	143.0	146.8	150.1	155.1
Order VII (excluding MLH 342)	Mechanical engineering industries	141.3	145.2	148.1	152.5	155.8	145.0	149.5	151.6	152.5	153.3	154.3	156.0	157.1	158.5
Order IX	Electrical engineering industries	140.6	142.1	143.4	148.3	151.1	142.4	144.6	146.9	148.4	149.5	149.6	151.3	152.5	154.1
Order X	Shipbuilding and marine engineering industries	141.4	146.1	150.9	156.0	158.9	145.6	152.8	155.5	155.9	156.6	158.0	158.8	160.0	162.0
Order XII	Metal goods industries	143.1	145.8	147.8	152.6	155.5	146.1	149.5	151.5	152.8	153.5	154.0	155.7	156.7	158.1
Order XIII	Textile industries	143.5	141.3	140.8	145.4	146.1	142.3	142.2	144.7	145.6	146.0	145.5	146.1	146.7	148.4
Order XV	Clothing and footwear industries	135.6	137.4	139.5	142.3	144.8	137.2	139.8	141.6	142.4	142.8	144.2	144.5	145.6	146.8
461, 464 and 469	Bricks, cement etc industries	144.4	146.2	148.6	152.9	154.5	145.9	150.2	152.0	153.1	153.6	154.1	154.5	154.8	155.9
462 and 463	Pottery and glass industries	150.3	152.6	155.3	158.6	160.2	152.4	155.8	157.7	158.9	159.2	159.8	160.3	160.6	162.7
Order XVII	Timber industries	151.3	147.7	146.1	147.0	150.7	148.9	145.8	146.2	146.7	148.1	149.4	150.9	151.8	152.5
481 to 484	Paper industries	132.4	123.0	117.5	120.6	120.2	124.4	118.2	120.1	121.0	120.7	120.8	119.9	119.8	124.0
Order XX	Construction materials	148.8	150.9	153.0	156.6	159.6	150.4	154.1	155.5	156.6	157.7	158.7	159.7	160.4	161.5
Part of Order XX	House building materials	149.7	150.9	152.5	156.2	159.8	150.8	153.8	155.0	156.0	157.7	158.7	159.9	160.7	161.6

[1] Includes crude oil and coal for carbonising. [2] Includes petroleum products. p Provisional.

Table 1a Price index numbers of materials and fuel purchased by selected sectors of industry

1975 = 100

1968 SIC		1977		1978			1977	1978							
		3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr p	Oct	Mar	Apr	May	Jun	Jul	Aug	Sep p	Oct p
361	Electrical machinery industry	139.6	143.3	145.5	149.4	152.5	143.0	146.7	148.5	149.3	150.3	151.3	152.6	153.7	154.8
362	Insulated wires and cables industry	138.7	137.4	136.2	142.8	145.2	138.7	137.0	140.4	142.8	145.1	143.4	145.7	146.5	147.8
364	Radio and electronic components industry	140.1	142.2	144.8	148.5	151.5	142.1	146.2	147.7	148.5	149.3	149.9	151.5	153.1	154.7
368	Domestic appliances industry	142.6	146.5	149.1	152.1	155.3	146.1	150.2	151.5	152.2	152.7	154.0	155.6	156.4	157.7
369	Electrical goods industries, nes	142.2	144.6	145.9	149.7	153.0	144.6	146.9	148.7	149.7	150.7	151.4	153.1	154.6	156.4
381	Motor vehicle industry	142.0	144.9	148.4	152.6	156.1	144.7	150.1	151.6	152.7	153.6	154.8	156.3	157.2	158.1
411	Man-made fibres industry	137.5	134.9	134.1	137.1	137.4	135.4	135.2	137.0	137.0	137.2	136.9	137.5	137.8	140.4
414	Woollen and worsted industry	139.6	139.4	139.2	150.5	154.3	139.6	141.2	145.3	151.5	154.7	155.1	154.3	153.6	153.2
422/1	Household textiles and handkerchiefs industry	140.7	139.8	140.9	143.7	146.5	140.3	141.5	142.5	143.7	144.8	145.7	146.3	147.4	148.7
450	Footwear industry	134.5	135.4	136.5	139.3	141.9	135.2	136.7	138.5	139.5	139.8	141.4	141.9	142.5	143.5
481	Paper and board making industry	133.4	121.7	115.2	118.5	118.0	123.4	115.8	118.0	119.0	118.6	118.6	117.8	117.6	122.2

p Provisional.

Higher prices for iron castings made the most significant contribution to the ½ per cent increase in the index for the metal manufacturing industry.

Higher prices for milk products were mainly responsible for the ¼ per cent increase in October in the index for the output of the food manufacturing industries. This index rose by 1 per cent in the latest three months.

The change in the index for all manufactured products measured over a 12-month period was 7¾ per cent for the third successive month. The increase in the index over the latest six months was again 3¾ per cent.

Input prices

The provisional price index for materials and fuel purchased by manufacturing industry increased by ¼ per cent in October to 145.7 (1975=100). The index rose 1½ per cent over the last 12 months.

The index for materials purchased by manufacturing industry other than food, drink and tobacco industries increased by ¾ per cent in October. The dollar's depreciation against sterling led to a fall in the price of crude oil. With crude oil excluded, the index rose by 2¾ per cent: there were higher prices for non-ferrous metals, particularly lead and cobalt, and also for woodpulp, imported steel and imported chemicals.

Most of the 3½ per cent increase in the index for materials and fuel purchased by the paper industries was accounted for by higher prices for woodpulp.

Higher prices for lead, cobalt and copper were responsible for most of the 3¼ per cent increase in the index for the non-ferrous metals industry. This index has increased by 8½ per cent in the latest three months.

Higher prices for soda ash made the most significant contribution to the 1¼ per cent increase in the index for the pottery and glass industries.

Half of the 1 per cent increase in the chemicals and allied industries was accounted for by higher prices for imported chemicals.

Higher prices for sand and gravel made the most significant contribution to the increases of ¾ per cent and ½ per cent in the indices for construction and housebuilding materials respectively.

Slightly higher prices throughout most of the sector, partially offset by lower prices for home-produced meat, were responsible for the rise of 1 per cent in the index for materials purchased by the food manufacturing industries.

'T & I' index inquiries

Readers wanting to know when articles and items of information were published in *Trade and Industry* should consult the published indexes which are issued free to subscribers. For material published in recent months, inquiries of this kind can be made to the Department of Industry Library's indexing section, tel. 01-215 5842 or 01-215 5879.

Notes on wholesale price indices

1 Detailed notes on index numbers of wholesale prices were last shown in *Trade and Industry*, 20 October 1978.

2 The index numbers are constructed on a net sector basis. This is to say, the price movements used to compile the index for a particular sector of industry are only those relating to transactions between the sector and other sectors. Transactions between undertakings in the same sector are excluded. Thus index numbers for the whole of manufacturing industry are not weighted averages of sector index numbers.

3 All the index numbers are compiled exclusive of value added tax and (before its abolition) of purchase tax. Revenue duties (on cigarettes and manufactured tobacco, alcoholic liquor, matches and mechanical lighters) are included. The duty on hydrocarbon oils is excluded from output price series that cover these products (unless specifically noted to the contrary) but is included in series for materials and fuel purchased by sectors of industry.

4 Firm and provisional indices, at all levels of aggregation, include imputation for items for which there is no current price information. Additional provisional figures will be published for those indices where there are insufficient returns to allow accurate imputation.

5 Revisions to firm index numbers will only be made if they are significatnt. These revisions will be notified when the series are next published.

6 Indices corresponding to those previously published in tables 3a and 3b are published this month but are renumbered 3 and 4 respectively.

The complete set of rebased indices (that is, including indices which were previously published only every four months) will be published for the first time in December and thenceforth will be published monthly.

Table 2 Price index numbers of output (home sales)

1975 = 100

1968 SIC Orders or MLH Numbers		1977		1978			1977	1978							
		3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr p	Oct	Mar	Apr	May	Jun	Jul	Aug	Sep p	Oct p
Orders III to XIX	Output of manufactured products	143.8	145.8	149.2	151.8	154.7	145.3	150.0	150.9	151.9	152.7	153.8	154.8	155.6	156.4
Orders IV to XIX	Products of manufacturing industries other than food, drink and tobacco manufacturing industries	140.6	143.3	146.6	149.4	152.2	142.6	147.4	148.5	149.5	150.3	151.4	152.2	153.1	154.2
	Output of selected broad sectors of industry														
211 to 229	Food manufacturing industries	153.7	153.8	157.2	160.1	163.7	153.8	157.9	158.8	160.2	161.4	162.9	163.7	164.4	164.7
211 to 229 (excluding MLH 219)	Food manufacturing industries (excluding animal and poultry foods)	154.0	155.3	159.2	162.1	165.3	155.0	160.0	161.0	162.2	163.0	164.3	165.3	166.2	166.7
Order V	Chemicals and allied industries	136.1	137.8	141.2	142.8	144.2	137.2	141.8	142.5	142.8	143.0	143.6	144.2	144.8	145.7
Order VI	Metal manufacturing	144.4	148.3	149.8	152.7	156.6	148.2	150.1	151.6	152.7	153.8	155.2	156.8	157.7	158.5
311 and 312	Steel industries	142.1	147.5	150.6	152.8	156.6	147.2	151.1	152.6	152.8	153.1	155.2	157.1	157.4	157.8
Orders VII to XII	Engineering and allied industries	139.2	143.3	147.5	151.0	154.7	142.2	148.5	149.8	151.0	152.2	153.6	154.7 p	155.9	157.0
Order VII (excluding MLH 342)	Mechanical engineering	138.8	143.1	147.7	150.7	154.3	142.1	148.7	150.0	150.9	151.2	153.0	154.3 p	155.7	157.3
Order VIII	Instrument engineering	134.6	139.5	145.8	147.2	149.3	138.7	146.4	146.9	147.2	147.5	148.8	149.5	149.7	152.0
Order IX	Electrical engineering	133.2	137.0	139.4	142.9	145.1	135.5	140.2	141.6	142.9	144.1	144.2	145.1 p	146.0	146.9
Order XI (excluding MLH 383)	Vehicles	147.4	151.2	157.0	160.0	165.5	150.3	158.0	158.7	159.6	161.7	164.9	165.6	165.9	166.4
Order XII	Metal goods industries nes	142.1	146.3	150.5	155.6	159.9	145.6	152.3	154.5	155.8	156.5	157.4	159.8	162.4	163.4
Order XIII	Textile industries	136.6	139.0	143.0	145.5	148.9	138.8	143.6	145.0	145.5	146.1	147.6	148.9	150.1	150.8
Order XV	Clothing and footwear	130.3	133.7	138.4	140.8	143.9	132.4	139.2	139.7	141.1	141.6	143.1	143.9	144.7	146.1
441 to 445 and 449	Made-up clothing	129.0	132.5	137.0	139.3	142.5	131.1	137.7	138.4	139.4	140.0	141.6	142.6	143.2	144.5
461, 464 and 469	Bricks, cement etc industries	153.8	157.5	160.1	166.2	170.3	156.7	162.2	164.8	165.8	168.1	169.2	170.4	171.2	172.9
462 and 463	Pottery and glass industries	141.3	148.3	151.9	155.4	158.3	146.7	153.2	155.0	155.1	156.2	157.5	157.8	159.5	163.2
Order XVII	Timber industries	139.3	141.9	144.4	145.8	148.9	141.3	145.2	145.4	145.8	146.1	147.7	148.9	150.1	150.4
481 to 484	Paper industries	130.2	131.9	132.4	133.5	134.5	131.7	132.5	133.2	133.6	133.8	134.2	134.6	134.6	137.1

p Provisional

Table 3 Commodities produced in the United Kingdom (published monthly)

1975 = 100

1968 SIC order or MLH and industry	1977 Oct	1978 Jul	Aug	Sep p	Oct p
II Mining and quarrying					
101 **Coal**	140.6	151.9	151.9	151.9	151.9
102 **Stone and slate quarrying and mining**	161.4	172.4	172.8	172.9	174.9
Coated limestone roadstone	164.0	174.2	174.2	174.2	177.0
103 **Chalk, clay, sand and gravel extraction**					
Sand and gravel – ex-pit or works	189.9	206.7	206.7	206.7	215.3
III Food, drink and tobacco					
240 **Tobacco**	151.1	156.0	159.9	161.2	161.2
IV Coal and petroleum products					
261 **Coke ovens and manufactured fuel**					
Foundry coke	140.2	152.5	152.5	152.5	152.5
262 **Mineral oil refining**					
Motor spirit	130.9	130.9	130.9	130.9	130.9
V Chemicals and allied industries					
271 **General chemicals**	141.0	145.3	146.2	146.4	148.1
271/1 **Inorganic chemicals**	144.6	154.7	155.4	155.1	158.7
271/2 **Organic chemicals**	137.0	138.5	139.8	140.1	140.9
272 **Pharmaceutical chemicals and preparations**					
Pharmaceutical preparations	142.0	153.6 p	153.9 p	153.9	154.6
273 **Toilet preparations**	138.5	148.7	149.0	149.8	150.1
274 **Paint**	132.2	140.9 p	140.9 p	141.8	142.5
276 **Synthetic resins and plastics materials and synthetic rubber**					
276/1 **Synthetic resins and plastics materials**	140.1	141.2	141.2	141.5	142.3
VI Metal manufacture					
311/2 **Steel**					
Non-alloy steels					
Heavy rails, sleepers and fishplates etc	135.6	148.6	148.6	148.6	148.6
Heavy rolled products 80 mm and over	147.9	161.4	161.4	161.4	161.4
Rods and bars in coils	142.9	149.6	151.4	151.4	151.4
Plates in coils and cut lengths	130.8	133.8	134.4	134.4	134.4
Steel sheets (under 3 mm thick)					
Uncoated steel sheet	155.9	165.3	167.6	167.6	167.6
Electrical steel sheet	158.2	165.3	167.7	167.7	167.7
Galvanised steel sheet	143.3	146.6	147.7	147.7	147.7
Tinplate and blackplate	155.0	163.4	163.4	163.4	163.4
Bright steel bars non alloy	156.5	163.6	168.0	168.3	168.3
Castings	149.5	162.1	162.1	162.1	163.9
Stainless and heat resisting alloy steels					
Steel under 3 mm thick					
Stainless steel sheets	154.7	166.4	166.9	166.9	166.9
Castings	142.5	153.7	153.7	157.0	157.2
Alloy steels other than stainless and heat resisting					
Plates in coils and cut lengths	124.5	134.9	138.4	138.4	138.4
Castings	144.5	156.0	156.0	159.6	160.7
312 **Steel tubes**	147.5	156.7	163.1	163.3	163.3
Fittings for steel tubes	136.7	149.2	149.2	149.2	149.2
321 **Aluminium and aluminium alloys**					
Aluminium plate, sheet, strip, circles and blanks	184.5	177.8	178.5	182.1	182.1
Aluminium extrusions and tubes (bars, rods, sections etc)	179.6	175.8	176.6	177.0	177.0
Aluminium forgings	158.7	171.5	188.2	188.2	191.5
322 **Copper, brass and other copper alloys**					
Copper tubes	135.2	144.7	145.1p	146.0	146.0
VII Mechanical engineering					
331 **Agricultural machinery**	150.5	165.1	165.5	170.3	171.9r
Soil preparation and cultivation machinery	147.6	162.8	162.8	167.4	169.1
Harvesting, threshing, feed processing etc machinery	155.7	168.0	168.4	175.1	176.3
Pick-up balers	161.5	167.9	167.9	176.0	179.8 e
Grinding mills and meal mixers (excluding combined mills and mixers)	138.7	163.1	163.3	164.0	164.5
Milking machinery					
Milking machines, including parts	154.7	170.4	170.4	170.6	172.5 e
332 **Metal working machine tools**	145.6	157.5 p	158.0 p	160.0	161.3
332/1 **Metal cutting machine tools**	146.6	159.2 p	159.6 p	161.5	162.9
332/2 **Metal forming machine tools**	144.5	154.1	154.5	156.1	157.4 e
333 **Pumps, valves, compressors and fluid power equipment**	137.2	147.6 p	148.7 p	149.9	152.2 e
333/1 **Pumps**	140.8	151.4	152.6	154.1	156.2
Centrifugal pumps	140.4	151.5	152.6	154.4	156.0
Kerbside petrol and oil measuring pumps and parts	136.4	144.6	149.2	149.2	149.2
333/2 **Industrial valves**	130.4	139.9	140.4	140.9	142.9 e
Valves – ferrous metal					
Iron valves	140.7	151.0	151.9	151.9	154.2 e
Steel valves	123.5	130.9	131.1	131.3	133.0 e
Valves – non-ferrous metal	137.7	151.4	152.2	153.5	156.1 e
333/3 **Air and gas compressors**	144.9	155.9 p	156.6 p	157.3	159.9 e
333/4 **Fluid power equipment**					
Oil/hydraulic fluid power equipment	138.5	151.7	152.6	155.3	158.3 e
Pneumatic control fluid power equipment	139.7	145.7	149.3	149.3	151.3
334 **Industrial engines**	152.3	168.7	168.8	170.3	172.0
336 **Construction and earth moving equipment**	156.4	171.1 p	171.5 p	173.4	175.0
Excavators, trenchers, ditchers and digging machinery including parts	158.5	180.7	180.9	180.9	181.2
Wheeled tractor shovels, crawler tractors, dumpers and other earth moving equipment					
Dumpers and dump trucks	146.5	152.3	153.3 p	160.6	162.5 e
Concrete mixing and placing machinery	143.3	157.7	159.4	161.0	162.2 e
Crushing, pulverising and screening plant, incl. parts	148.7	160.7	160.7	160.7	165.1 e
337 **Mechanical handling equipment**	143.0	153.0	155.5 p	157.0	158.8
337/2 **Cranes and transporters**	143.7	151.4	152.6	154.7	156.2 e
337/4 **Lifting and winding devices**	142.5	152.4	152.4	156.8	157.4
337/5 **Powered industrial trucks and tractors**	150.6	161.9	164.3	164.9	166.3 e
339/1 **Mining machinery**	138.9	146.7 p	152.9 p	153.9	155.2
339/3 **Refrigerating machinery**	150.5	164.4	164.7	165.6	167.2 e
339/5 **Scales and weighing machinery (excluding precision balances)**	136.9	154.1	154.1	154.3	154.4
339/6 **Portable power tools**	142.5	151.6	151.8	153.0	155.0 e
339/7 **Food and drink processing machinery**	141.1	153.7	155.4	156.1	157.6
339/9 **Miscellaneous (non-electrical) machinery**	146.3	157.8 p	159.6 p	161.5	165.9 e
VIII Instrument engineering					
352 **Clocks, watches and time recorders**	137.6	154.0	154.1	154.2	154.6
354 **Scientific and industrial instruments and systems**	137.2	146.1	147.0 p	147.2	149.3
Other scientific and industrial instruments (non-optical)					
Analytical instruments	138.2	144.7	144.6	144.8	145.3
Spectrophotometers and absorptiometers	124.8	135.5	135.5	135.5	135.5
Electrical measuring, testing and controlling instruments and apparatus	134.9	143.0	142.0 p	142.0	143.8
IX Electrical engineering					
365 **Broadcasting receiving and sound reproducing equipment**	126.2	128.1 p	131.3 p	131.7	133.1 e
365/1 **Gramophone records and tape recordings**	140.7	143.3 p	156.0 p	157.7	161.1 e
Gramophone records	142.3	144.6 p	157.7 p	159.8	163.4 e
365/2 **Broadcast receiving and sound reproducing equipment, other than gramophone records and tape recordings**	121.7	123.4 p	123.7 p	123.7	124.5 e
Domestic television receivers	123.6	125.9 p	125.8 p	126.3	127.2 e
—monochrome	126.9	126.9 p	126.9 p	126.9	126.9 e
—colour	123.3	125.8 p	125.7 p	126.3	127.2 e
368 **Electrical appliances primarily for domestic use**	145.4	154.0 p	154.3 p	155.5	157.0 e
Domestic electric cooking apparatus	146.1	156.8	156.9	157.2	160.6
Domestic electric flat irons	138.3	148.2	148.2	148.2	151.8 e
Domestic electric heating apparatus	150.7	159.5 p	160.5 p	164.1	164.1
Electric water heaters	145.5	161.3	161.3	161.3	161.3
Vacuum cleaners	150.8	156.3	157.1	157.1	158.2 e
Domestic refrigerators and freezers	138.7	145.2	145.2	145.2	146.5 e
369/4 **Electric lamp bulbs and tubes**	146.8	155.4	155.4	155.4	155.9
XI Vehicles					
380 **Wheeled tractors, complete**	166.3	183.9	184.0	184.0	184.0
381 **Motor vehicles**					
Passenger cars	153.3	169.7	170.1	170.1	170.1
Passenger cars'	153.3	169.7	170.1	170.1	170.1
Commercial and public service vehicles	151.7	167.8	167.9	168.1	168.9
Commercial vehicles	152.5	169.2	169.3	169.4	169.4
Commercial vehicles and chassis not exceeding 3.5 tons gvw	158.3	176.2	176.4	176.4	176.4
Commercial vehicles and chassis exceeding 3.5 tons but not exceeding 16 tons gvw	151.1	167.0	167.0	167.0	167.7
Commercial vehicles and chassis exceeding 16 tons gvw	147.1	163.4	163.6	163.8	163.8
Public service vehicles	149.9	164.9	164.9	165.3	167.9
XII Metal goods not elsewhere specified					
390 **Engineers' small tools and gauges**					
Engineers' cutting tools	160.0	171.1	175.0	176.4	177.1
Diamond tipped tools and diamond dies	150.0	177.2	177.2	193.1	200.3
Saws					
Hacksaw blades	181.8	186.0	196.8	200.3	202.4
391 **Hand tools and implements**	149.4	163.7	165.2	169.1	170.3
392 **Cutlery, spoons, forks and plated tableware etc**	141.8	157.2	157.2	159.9	160.2
393 **Bolts, nuts, screws, rivets etc**					
Bolts etc of iron and steel					
Precision standard bolts etc of high tensile steel	142.4	150.1	150.1	150.1	151.3
399 **Metal industries not elsewhere specified**					
399/1 **Metal furniture**					
Filing cabinets and other filing containers	139.7	156.2	157.6	160.9	163.0
399/2 **Metal windows and door frames**	156.6	165.4	165.4	167.5	168.5
399/9 **Domestic gas appliances**	151.1	162.2	162.5	165.4	166.3
Gas cookers	150.5	161.0	161.0	164.8	166.4
Gas fires and space heaters	152.4	164.7	164.9	164.9	164.9
Water heaters and other domestic gas apparatus (excluding refrigerators and meters)	151.5	162.6	164.9	168.7	168.7

Table 3 Commodities produced in the United Kingdom (published monthly) *continued*

1975 = 100

1968 SIC order or MLH and industry	1977 Oct	1978 Jul	Aug	Sep p	Oct p
XIII Textiles					
411 **Man-made fibres production**	126.3	127.8	128.5	128.8	129.2
413 **Weaving of cotton, linen and man-made fibres**	132.4	137.8	138.1	138.5	139.4
Woven cotton cloth in the loomstate	140.1	144.0	144.2	145.2	146.8
414 **Woollen and worsted products**	148.7	155.8 p	155.8 p	156.7	158.4 e
414/2 **Yarns spun on the worsted and semi-worsted systems**	140.4	149.8	150.0	150.1	150.0
Yarns of wool spun on the worsted system	149.8	154.8	154.9	154.9	154.8
Yarns of man-made fibres spun on the worsted system	128.5	137.3	137.4	137.4	137.4
419 **Carpets and rugs**	139.0	148.5	152.5	154.5	154.6
Woven carpets and carpet type rugs	150.1	161.6	167.8	167.8	167.8
429 **Other textile industries**					
429/1 **Asbestos manufactures**	155.1	173.1	173.3	173.3	173.3
XIV Leather, leather goods and fur					
431/1 **Finished leather – for footwear**	133.2	137.9	137.9	138.3	139.3
XV Clothing and footwear					
450 **Footwear**	136.9	148.1	148.5	150.2	151.7
XVI Bricks, pottery, glass, cement, etc					
461 **Bricks, fireclay and refractory goods**	154.3	165.9	166.4	168.3	169.5
461/1 **Refractory goods**	163.3	167.7	168.0	169.9	171.9
461/2 **Clay building bricks and other non-refractory goods**	147.8	163.6	164.4	166.2	166.9
463 **Glass**	149.2	158.6	159.0	160.7	165.1
463/1 **Glass other than containers and vacuum ware**	149.3	157.1	157.8	160.9	162.3
463/2 **Glass containers and vacuum ware**					
Glass containers	149.0	160.4	160.4	160.4	168.2
464 **Cement**					
Calcareous cement (other than clinker) delivered in bulk	154.0	169.2	169.2	169.2	169.2
469/2 **Miscellaneous building materials and mineral products**	158.2	170.7	172.4	172.9	174.7
Precast concrete goods	150.0	163.2	166.3	166.7	167.2
Precast concrete pipes to BS 556 – delivered	165.5	174.9	175.9	175.9	175.9
XVII Timber, furniture, etc					
471/1 **Timber sawmilling, etc**					
Homegrown sawn hardwood	151.0	167.9	168.9	168.9	168.9
471/2 **Builders' woodwork**	148.6	153.6	153.8	157.4	158.1
Timber structures and structural components	141.9	148.7	149.1	158.1	158.3
Window frames	155.1	157.5	157.5	157.5	157.5
472 **Furniture and upholstery**	150.8	145.0	147.0	147.6	147.9
Domestic wooden furniture	140.1	149.2	151.3	151.9	152.3
Bedroom furniture, excluding built-in	134.4	146.6	147.5	147.6	148.3
Occasional furniture for dining/living room	132.6	143.2	148.0	149.5	149.5
Dining/living room furniture excluding built-in	140.6	150.8	152.3	153.7	154.9
Kitchen furniture excluding built-in	142.4	152.4	153.5	153.5	153.5
Domestic upholstered furniture	131.2	139.0	141.8	143.0	143.2
473 **Bedding and soft furnishings**					
Fully finished mattresses	150.4	160.8	160.9	161.2	161.7
XVIII Paper, printing and publishing					
481 **Paper and board**	132.0	130.8	130.9	131.1	133.1
482 **Packaging products of paper, board and associated materials**					
482/1 **Cardboard boxes, cartons and fibreboard packingcases**	134.0	138.5	139.0	139.1	142.9
483 **Manufactured stationery**	139.2	145.0	146.3 p	146.4	147.9
XIX Other manufacturing industries					
491 **Rubber manufactures**					
491/1 **Tyres and tubes**	145.8	150.9	152.1	152.1	152.3
492 **Linoleum, plastics, floorcovering, leathercloth, etc**					
Floorcovering of linoleum and printed felt base	141.3	152.4	152.4	152.4	152.4
Special indices					
Granite and limestone roadstone	155.0	165.7	166.5	166.7	168.5
Granite and other chippings	143.0	151.1	152.7	154.2	154.6
Sand and gravel – delivered	167.3	181.3	181.6	181.7	187.6
Medium fuel oil (950 seconds including duty)	169.5	169.5	169.5	169.5	169.5
Derv	160.3	160.3	160.3	160.3	160.3
Semi-finished steel for forgings (other than drop forgings)	162.2	168.9	169.6	169.6	169.6
Steel sheets	154.0	162.3	164.3	164.3	164.3
Finished steels (other than sheets, tinplates, tubes, forgings and castings)	143.0	149.9	151.5	151.5	151.8
Steel sheet piling	148.5	166.8	166.8	166.8	166.8
Light re-rolled bars and sections	141.6	147.5	148.3	148.3	148.3
Finished stainless steels	142.4	142.1	142.1	142.1	142.1
Steel castings	146.9	158.9	158.9	160.5	161.8
Structural steel	139.6	149.0	150.0	150.0	150.0
Steel tubes (other than electric conduit tubes)	149.8	160.5	171.0	171.4	171.4
Cast and spun iron pipes and fittings	140.7	152.0	152.0	152.0	152.0
Iron castings	141.8	153.3 p	153.6 p	153.8	155.6
Malleable iron castings	143.1	156.9	156.6	156.6	156.7
Wrought aluminium	171.8	175.5	176.4	178.6	179.0
Industrial pumps	141.0	151.8	152.8	154.4	156.6
Primary and secondary batteries	153.4	162.5	162.5	164.3	165.3 e
Catering equipment	147.5	158.0	159.1 p	162.9	162.9
Plumbers' brassware	144.9	157.4	157.4	157.4	158.0
Engineering bricks – delivered	145.9	162.1	162.3	164.4	164.4
Glazing sheet and plate glass	159.5	159.5	159.5	168.0	169.0
Cement in bags	154.6	170.0	170.0	170.0	170.9
Door sets, leafs and frames	154.5	156.7	157.0	157.0	159.8
Domestic furniture	137.3	146.0	148.3	149.0	149.4
Divan sets	139.5	150.0	150.2	154.3	154.3
Electrical installation materials, domestic	138.0	146.3	149.7	150.0	150.8
Office equipment and machinery	153.6	147.8	150.2	150.4	151.1
Office furniture	132.7	146.8	151.7	152.3	153.2

Addendum to table 3: confirmation of figures previously published as provisional

1968 SIC		1978 May	Jun
331	**Agricultural machinery**	163.0	163.3
	Soil preparation and cultivation machinery	160.3	160.4
	Harvesting, threshing, feed processing etc machinery	166.4	167.0
332/2	**Metal forming machine tools**	152.3	153.3
333	**Pumps, valves, compressors and fluid power equipment**	146.8	147.2
333/3	**Air and gas compressors**	155.8	155.8
334	**Industrial engines**	167.7	168.2
336	**Construction and earth-moving equipment**	—	—
	Excavators, trenchers, ditchers and digging machinery including parts	177.1	178.5
337	**Mechanical handling equipment**	152.0	152.5
337/2	**Cranes and transporters**	—	151.1
337/5	**Powered industrial trucks and tractors**	161.4	—
339/3	**Refrigerating machinery**	—	162.5
339/6	**Portable power tools**	—	147.8
413	**Weaving of cotton, linen and man-made fibres**	136.5	137.2
414/2	**Yarns spun on the worsted and semi-worsted systems**	148.6	149.7
419	**Carpets and rugs**	146.8	147.4
483	**Manufactured stationery**	144.3	144.6

More about wholesale prices

01-215 3544 tables 1, 1a and 2
01-215 3549 table 3
01-215 3173 tables 4 and 5

[1] Inclusive of VAT and car tax. [2] These indices are specially constructed outside the normal wholesale price index structure. Their continued publication is a temporary measure to enable extant VOP contracts to be completed. p Provisional. e Estimates which are subject to possible major revision. r Revision.

Table 4 Commodities wholly or mainly imported into the United Kingdom

1975 = 100

	1977 Oct	1978 Jul	Aug	Sep	Oct
Hides and skins, UK origin and imported	196.4	250.8	269.8	278.9	285.2
Natural rubber smoked sheet [1]	176.6	172.5	179.1	191.5	197.5
Wood, lumber and cork					
Softwood (delivered to consumers)	155.2	148.1	149.2	150.3	150.7 e
Hardwood (ex yard or wharf)	164.7	169.2	171.2	172.2	174.3
Plywood and blockboard (delivered to consumers)	147.7	151.2	153.3	154.3	154.8 e
Woodpulp	103.1	92.3	90.1	89.4	96.4
Textile fibres					
Raw wool, greasy or fleece washed	157.9	155.6	150.6	151.2	152.0
Merino	140.7	139.2	135.6	134.4	133.2
Crossbred	179.4	176.0	169.2	172.2	175.4
Raw wool, UK origin	200.0	200.4	199.4	198.8	199.7
Raw wool, UK origin and imported	166.3	164.5	160.4	160.8	161.5
Raw cotton [1]	142.2	159.5	160.1	161.1	163.0
Non-ferrous metals					
Copper, LME settlement price [1]	122.9	126.4	131.7	131.9	134.5
Aluminium, virgin ingot, delivered, producers' price [1]	173.9	173.9	173.9	180.4	181.5
Lead, LME settlement price [1]	186.9	165.1	176.7	190.0	223.2
Zinc, producers' price [1]	105.5	83.0	84.4	87.9	92.2
Zinc, LME settlement price [1]	86.2	91.8	94.9	96.4	106.0
Tin, ingot, min 99.75%, LME settlement price [1]	222.6	212.1	216.8	229.3	245.2

[1] Source of information: trade publications. p Provisional. e Estimates which are subject to possible major revision.

Table 5 United Nations index numbers of world export prices [1]

1970 = 100

	Primary commodities									Primary commodities and non-ferrous metals [2]		
	Total			Agricultural non-food			Non-ferrous metals					
	$	£	Purchasers' currencies	$	£	Purchasers' currencies	$	£	Purchasers' currencies	$	£	Purchasers' currencies
1974 1st qtr	303	318	274	232	244	209	160	168	144	284	298	256
2nd qtr	304	304	263	229	229	198	183	183	159	288	287	249
3rd qtr	309	315	274	221	225	196	142	145	126	287	292	254
4th qtr	320	330	284	212	213	186	126	130	111	294	303	258
1975 1st qtr	312	313	261	201	202	168	124	124	101	287	287	240
2nd qtr	299	309	250	198	204	166	121	125	101	275	284	230
3rd qtr	295	333	261	196	220	173	118	133	105	271	306	240
4th qtr	301	354	271	191	224	172	116	136	104	276	324	249
1976 1st qtr	306	368	279	202	243	184	120	144	109	281	338	256
2nd qtr	310	412	289	212	282	198	135	179	126	286	381	267
3rd qtr	314	427	291	227	308	211	140	190	130	291	395	270
4th qtr	316	459	290	232	337	213	131	190	120	291	423	267
1977 1st qtr	341	478	311	241	338	220	142	199	130	314	440	286
2nd qtr	350	489	316	249	348	224	143	200	129	322	450	289
3rd qtr	339	469	302	227	314	202	138	191	123	312	432	278
4th qtr	338	447	292	221	292	191	141	187	122	312	412	269
1978 1st qtr	344	428	284	229	285	189	140	174	116	317	394	262
2nd qtr [3]	347	454	283	240	314	196	141	184	115	319	417	261
3rd qtr [4]	*350*	*435*	*272*	*253*	*314*	*196*	*151*	*188*	*118*	*324*	*402*	*251*
October [4]	*360*	*431*	*265*	*269*	*322*	*198*	*165*	*197*	*121*	*334*	*399*	*246*

[1] Published by the UN in terms of US dollars. For convenience the index numbers are also shown in sterling and in terms of purchasers' currencies by converting the dollar index at prevailing exchange rates. [2] This combined index is not published as such by the UN. [3] Provisional. [4] Projections by Department of Industry.

Wholesales price indices: note on multiplication factors

For the convenience of those who use the index numbers in long term contracts to take account of changes in cost of materials the following multiplication factors are provided. These factors enable users to extend the 1970 = 100 indices beyond May 1978; the last firm month to be published on the old base, by using the movements of the equivalent index on the 1975 = 100 series.

Because May 1978 was the last firm month published on the old base the multiplication factor is obtained by dividing the base 1970 = 100 May figure by the base 1975 = 100 May figure. To extend the 1970 base series beyond May 1978 the appropriate monthly index value on base 1975 = 100 is multiplied by the factor shown in the table below.

Multiplication factors for use with table 1 indices

1968 SIC orders or MLH numbers		Multiplication factor
Orders III to XIX	Materials and fuel purchased by manufacturing industry:	2.326
	Materials	2.374
	Coal (except for carbonising), gas and electricity	1.918
Orders IV to XIX	Materials and fuel purchased by manufacturing industry other than food, drink and tobacco manufacturing industries:	2.487
	Materials	2.586
Order III	Materials and fuel purchased by the food, drink and tobacco manufacturing industries	2.052
	Materials and fuels purchased by selected broad sectors of industry	
211 to 229	Food manufacturing industries:	2.027
	Materials	2.026
	Fuel	2.070
211 to 229 (excluding MLH 219)	Food manufacturing industries (excluding animal and poultry foods)	2.016
Order V	Chemicals and allied industries	2.216
311 and 312	Steel industries	2.322
321 to 323	Non-ferrous metals industry	1.488[3]
Order VII (excluding MLH 342)	Mechanical engineering industries	2.074
Order IX	Electrical engineering industries	1.787
Order X	Shipbuilding and marine engineering industries	1.929
Order XII	Metal goods industries	2.144
Order XIII	Textile industries	2.093
Order XV	Clothing and footwear industries	1.818
461, 464 and 469	Bricks, cement etc industries	2.215
462 and 463	Pottery and glass industries	2.094
Order XVII	Timber industries	2.198[3]
481 to 484	Paper industries	2.392
Order XX	Construction materials	2.017
Part of order XX	House building materials	2.059

Multiplication factors for use with table 1a indices

1968 SIC		Multiplication factor
361	Electrical machinery industry	1.941
362	Insulated wires and cables industry	1.385
364	Radio and electronic components industry	1.923
368	Domestic appliances industry	1.846
369	Electrical goods industries nes	1.806
381	Motor vehicle industry	2.093
411	Man-made fibres industry	2.110
414	Woollen and worsted industry	2.199
422/1	Household textiles and handkerchiefs industry	1.933
450	Footwear industry	1.842
481	Paper and board making industry	2.348

Multiplication factors for use with table 2 indices

1968 SIC orders or MLH numbers		Multiplication factor
Orders III to XIX	Output of manufactured products	1.874
Orders IV to XIX	Products of manufacturing industries other than food, drink and tobacco manufacturing industries	1.959
	Output of selected broad sectors of industry	
211 to 229	Food manufacturing industries	1.922
211 to 229 (excluding MLH 219)	Food manufacturing industries (excluding animal and poultry foods)	1.917
Order V	Chemicals and allied industries	1.906
Order VI	Metal manufacturing	2.030
311 and 312	Steel industries	2.257
Orders VII to XII	Engineering and allied industries	1.925
Order VII (excluding MLH 342)	Mechanical engineering	1.972
Order VIII	Instrument engineering	1.667
Order IX	Electrical engineering	1.808
Order XI (excluding MLH 383)	Vehicles	2.098
Order XII	Metal goods industries nes.	1.959
Order XIII	Textile industries	1.775
Order XV	Clothing and footwear	1.641
441 to 445 and 449	Made-up clothing	1.577
461, 464 and 469	Bricks, cement, etc, industries	2.019
462 and 463	Pottery and glass industries	1.930
Order XVII	Timber industries	2.047
481 to 484	Paper industries	2.249

Multiplication factors for use with table 3 indices

1968 SIC order or MLH no.	Industry	Multiplication factor
II	**Mining and quarrying**	
101	**Coal**	2.904
102	**Stone and slate quarrying and mining**	2.015
	Coated limestone roadstone	2.328
103	**Chalk, clay, sand and gravel extraction**	
	Sand and gravel – ex-pit or works	1.700
III	**Food, drink and tobacco**	
240	**Tobacco**	1.408
IV	**Coal and petroleum products**	
261	**Coke ovens and manufactured fuel**	
	Foundry coke	3.344
262	**Mineral oil refining**	
	Motor spirit	1.732
V	**Chemicals and allied industries**	
271	**General chemicals**	2.053
271/1	**Inorganic chemicals**	1.975
271/2	**Organic chemicals**	2.229
272	**Pharmaceutical chemicals and preparations**	
	Pharmaceutical preparations	1.599 p
273	**Toilet preparations**	1.665
274	**Paint**	2.100
276	**Synthetic resins and plastics materials and synthetic rubber**	
276/1	**Synthetic resins and plastics materials**	1.783
VI	**Metal manufacture**	
311/2	**Steel**	
	Non-alloy steels	
	Heavy rails, sleepers and fishplates, etc	2.527
	Heavy rolled products 80 mm and over	2.387
	Rods and bars in coils	2.244
	Plates in coils and cut lengths	2.685
	Steel sheets (under 3 mm thick)	
	Uncoated steel sheet	2.053
	Electrical steel sheet	2.053
	Galvanised steel sheet	2.191
	Tinplate and backplate	2.167

1968 SIC order or MLH no.	Industry	Multiplication factor
	Bright steel bars non-alloy	2.157
	Castings	2.108 r
	Stainless and heat resisting alloy steels	
	Steel under 3 mm thick	
	Stainless steel sheets	1.525
	Castings	1.890
	Alloy steels other than stainless and heat resisting	
	Plates in coils and cut lengths	2.743
	Castings	2.320 r
312	**Steel tubes**	2.476
	Fittings for steel tubes	2.252
321	**Aluminium and aluminium alloys**	
	Aluminium plate, sheet, strip, circles and blanks	1.670
	Aluminium extrusions and tubes (bars, rods, sections, etc)	1.669
	Aluminium forgings	1.691
322	**Copper, brass and other copper alloys**	
	Copper tubes	1.141
VII	**Mechanical engineering**	
331	**Agricultural machinery**	1.992 p
	Soil preparation and cultivation machinery	1.972 p
	Harvesting, threshing, feed processing, etc, machinery	2.016 p
	Pick-up balers	2.031
	Grinding mills and meal mixers (excluding combined mills and mixers)	2.068
	Milking machinery	
	Milking machines, including parts	1.867
332	**Metal working machine tools**	2.133 p
332/1	**Metal cutting machine tools**	2.153 p
332/2	**Metal forming machine tools**	2.085
333	**Pumps, valves, compressors and fluid power equipment**	1.960 p
331/1	**Pumps**	1.843
	Centrifugal pumps	1.880
	Kerbside petrol and oil measuring pumps and parts	1.945
333/2	**Industrial valves**	2.206
	Valves – ferrous metal	
	Iron valves	2.115
	Steel valves	2.386
	Valves – non-ferrous metal	1.949
333/3	**Air and gas compressors**	2.022 p
333/4	**Fluid power equipment**	
	Oil/hydraulic fluid power equipment	1.790
	Pneumatic control fluid power equipment	1.615
334	**Industrial engines**	1.901 p
336	**Construction and earth moving equipment**	1.883 p
	Excavators, trenchers, ditchers and digging machinery including parts	1.986 p
	Wheeled tractor shovels, crawler tractors, dumpers and other earth moving equipment	
	Dumpers and dump trucks	1.980
	Concrete mixing and placing machinery	1.995
	Crushing, pulverising and screening plant, including parts	1.972
337	**Mechanical handling equipment**	1.931 p
337/2	**Cranes and transporters**	1.896
337/4	**Lifting and winding devices**	1.963
337/5	**Powered industrial trucks and tractors**	1.966
339/1	**Mining machinery**	1.775 p
339/3	**Refrigerating machinery**	1.867
339/5	**Scales and weighing machinery (excluding precision balances)**	2.096
339/6	**Portable power tools**	1.739
339/7	**Food and drink processing machinery**	1.981
339/9	**Miscellaneous (non-electrical) machinery**	1.914
VIII	**Instrument engineering**	
352	**Clocks, watches and time recorders**	1.803
354	**Scientific and industrial instruments and systems**	1.698
	Other scientific and industrial instruments (non-optical)	
	Analytical instruments	1.563
	Spectrophotometers and absorptiometers	1.398
	Electrical measuring, testing and controlling instruments and apparatus	1.627
IX	**Electrical engineering**	
365	**Broadcasting receiving and sound reproducing equipment**	1.323 p
365/1	**Gramophone records and tape recordings**	1.569 p
	Gramophone records	1.608 p
365/2	**Broadcast receiving and sound reproducing equipment, other than gramophone records and tape recordings**	1.356
	Domestic television receivers	1.346 p
	—monochrome	1.368
	—colour	1.238 p
368	**Electrical appliances primarily for domestic use**	1.594
	Domestic electric cooking apparatus	1.646
	Domestic electric flat irons	1.898
	Domestic electric heating apparatus	1.643
	Electric water heaters	2.046
	Vacuum cleaners	1.665
	Domestic refrigerators and freezers	1.593
369/4	**Electric lamp bulbs and tubes**	1.643
XI	**Vehicles**	
380	**Wheeled tractors, complete**	2.296
381	**Motor vehicles**	
	Passenger cars	2.012
	Passenger cars [1]	1.835
	Commercial and public service vehicles	2.224
	Commercial vehicles	2.240
	Commercial vehicles and chassis not exceeding 3.5 tons gvw	2.177
	Commercial vehicles and chassis exceeding 3.5 tons but not exceeding 16 tons gvw	2.288
	Commercial vehicles and chassis exceeding 16 tons gvw	2.101
	Public service vehicles	2.160
XII	**Metal goods not elsewhere specified**	
390	**Engineers' small tools and gauges**	
	Engineers' cutting tools	1.629
	Diamond tipped tools and diamond dies	1.395
	Saws	
	Hacksaw blades	1.594
391	**Hand tools and implements**	2.131
392	**Cutlery, spoons, forks and plated tableware, etc**	1.931
393	**Bolts, nuts, screws, rivets, etc**	
	Bolts, etc, of iron and steel	
	Precision standard bolts, etc, of high tensile steel	2.571
399	**Metal industries not elsewhere specified**	
399/1	**Metal furniture**	
	Filing cabinets and other filing containers	1.773
399/2	**Metal windows and door frames**	2.723
399/9	**Domestic gas appliances**	1.536
	Gas cookers	1.536
	Gas fires and space heaters	1.479
	Water heaters and other domestic gas apparatus (excluding refrigerators and meters)	1.664
XIII	**Textiles**	
411	**Man-made fibres production**	1.583
413	**Weaving of cotton, linen and man-made fibres**	1.952
	Woven cotton cloth in the loomstate	1.878
414	**Woollen and worsted products**	1.960
414/2	**Yarns spun on the worsted and semi-worsted systems**	1.932
	Yarns of wool spun on the worsted system	1.480
	Yarns of man-made fibres spun on the worsted system	1.665
419	**Carpets and rugs**	1.841
	Woven carpets and carpet type rugs	1.881
429	**Other textile industries**	
429/1	**Asbestos manufactures**	1.621
XIV	**Leather, leather goods and fur**	
431/1	**Finished leather – for footwear**	1.605
XV	**Clothing and footwear**	
450	**Footwear**	1.783
XVI	**Bricks, pottery, glass, cement, etc**	
461	**Bricks, fireclay and refractory goods**	2.128
461/1	**Refractory goods**	2.099
461/2	**Clay building bricks and other non-refractory goods**	2.181
463	**Glass**	1.937
463/1	**Glass other than containers and vacuum ware**	1.899
463/2	**Glass containers and vacuum ware**	
	Glass containers	1.999
464	**Cement**	
	Calcareous cement (other than clinker) delivered in bulk	2.042
469/2	**Miscellaneous building materials and mineral products**	1.988
	Precast concrete goods	1.977
	Precast concrete pipes to BS 556 – delivered	2.142
XVII	**Timber, furniture, etc**	
471/1	**Timber sawmilling, etc**	
	Homegrown sawn hardwood	2.162
471/2	**Builders' woodwork**	2.253
	Timber structures and structural components	2.300
	Window frames	2.407
472	**Furniture and upholstery**	1.894
	Domestic wooden furniture	1.906
	Bedroom furniture, excluding built-in	1.717
	Occasional furniture for dining/living room	1.919
	Dining/living room furniture exluding built-in	1.919
	Kitchen furniture excluding built-in	2.086
	Domestic upholstered furniture	1.762
473	**Bedding and soft furnishings**	
	Fully finished mattresses	1.972
XVIII	**Paper, printing and publishing**	
481	**Paper and board**	2.206
482	**Packaging products of paper, board and associated materials**	
482/1	**Cardboard boxes, cartons and fibreboard packing cases**	2.197
483	**Manufactured stationery**	2.211
XIX	**Other manufacturing industries**	
491	**Rubber manufactures**	
491/1	**Tyres and tubes**	1.773
492	**Linoleum, plastics, floorcovering, leathercloth, etc**	
	Floorcovering of linoleum and printed felt base	1.787
	Special indices [2]	
	Granite and limestone roadstone	1.975
	Granite and other chippings	1.934
	Sand and gravel – delivered	1.527
	Medium fuel oil (950 seconds including duty)	2.981
	Derv	1.501
	Semi-finished steel for forgings (other than drop forgings)	2.353
	Steel sheets	2.005
	Finished steels (other than sheets, tinplates, tubes, forgings and castings)	2.299
	Steel sheet piling	2.409
	Light re-rolled bars and sections	2.336
	Finished stainless steels	1.782
	Steel castings	2.110
	Structural steel	2.451
	Steel tubes (other than electric conduit tubes)	2.436
	Cast and spun iron pipes and fittings	2.394
	Iron castings	2.237 p
	Malleable iron castings	2.361
	Wrought aluminium	1.724
	Industrial pumps	1.837
	Primary and secondary batteries	1.797
	Catering equipment	1.735
	Plumbers' brassware	1.586 p
	Engineering bricks – delivered	2.326
	Glazing sheet and plate glass	1.664
	Cement in bags	2.035
	Door sets, leafs and frames	2.268
	Domestic furniture	1.845
	Divan sets	2.251
	Electrical installation materials, domestic	1.903
	Office equipment and machinery	1.737 p
	Office furniture	2.119

[1] Inclusive of VAT and car tax. [2] These indices are specially constructed outside the normal wholesale price index structure. Their continued publication is a temporary measure to enable extant VOP contracts to be completed.[3] The May 1975 = 100 figures for these indices were still provisional when the multiplication factors were first published. Both indices for May are now firm and the revised factors are as shown. p Provisional. r Revised.

Multiplication factors for use with table 4 indices

	Multiplication factor
Hides and skins, UK origin and imported	1.585
Natural rubber smoked sheet [1]	1.618
Wood, lumber and cork	
Softwood (delivered to consumers)	2.386
Hardwood (ex yard or wharf)	2.226
Plywood and blockboard (delivered to consumers)	2.218
Woodpulp	2.810
Textile fibres	
Raw wool, greasy or fleece washed	2.084
Merino	2.125
Crossbred	1.882
Raw wool, UK origin	1.740
Raw wool, UK origin and imported	1.996
Raw cotton [1]	1.978
Non-ferrous metals	
Copper, LME, settlement price [1]	0.946
Aluminium, virgin ingot, delivered, producers price [1]	1.528
Lead, LME settlement price [1]	1.468
Zinc, producers price [1]	2.861
Zinc, LME settlement price [1]	2.722
Tin, ingot, min 99.75%, LME settlement price [1]	2.019

[1] Source of information: trade publications.
p Provisional.

Retailers' stocks in September

Based on the non-seasonally adjusted data of table 1, the level of stocks at book values in September was £274 million higher than the previous month and 15 per cent higher than the same month a year earlier; at constant (1975) prices it was 7 per cent higher than a year earlier.

The estimate of the value of physical increase of retailers' stocks at 1975 prices and seasonally adjusted (table 2) suggests an increase of £12 million. This small increase occurred in a month when the seasonally adjusted volume of retail sales fell back from the higher levels experienced in July and August, but remained above level of earlier months of this year. As a result, the ratio of stocks to sales (table 3) rose in September and is now at its highest monthly level this year. The ratio for the third quarter as a whole fell slightly and stands at the average level of the first three quarters of the year taken together, which is historically high.

Table 1 Level of retailers' stocks

£ million — At cost at end of month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
At book values												
1975	2 766	2 814	2 947	2 856	2 948	2 985	2 962	2 963	3 139	3 452	3 700	3 333
1976	3 151	3 195	3 388	3 389	3 382	3 379	3 311	3 319	3 547	3 941	4 229	3 799
1977	3 656	3 726	4 095	4 163	4 165	4 220	4 029	4 037	4 286	4 695	5 170	4 417
1978	4 197	4 220	4 522	4 597	4 625	4 744	4 637	4 658	4 932			
Change in book values												
1975	−120	48	133	−91	92	37	−23	1	176	313	248	−367
1976	−182	44	193	1	−7	−3	−68	8	228	394	288	−430
1977	−143	70	369	68	2	55	−191	8	249	409	475	−753
1978	−220	23	302	75	28	119	−107	21	274			
Percentage change on a year earlier												
1975	15	17	17	10	10	10	10	11	13	14	16	15
1976	14	14	15	19	15	13	12	12	13	14	14	14
1977	16	17	21	23	23	25	22	22	21	19	22	16
1978	15	13	10	10	11	12	15	15	15			
At constant (1975) prices – percentage change on a year earlier												
1975	−7	−6	−7	−12	−12	−11	−11	−10	−7	−5	−3	−3
1976	−2	−2	—	5	2	1	1	1	1	2	1	—
1977	1	1	4	5	5	6	3	3	3	2	5	1
1978	1	1	−1	—	1	3	6	6	7			

Table 2 Retailers' stocks at 1975 prices

Seasonally adjusted — £ million

	Stocks level	Value of physical increase
1971		
1st qtr	2 720	−34
2nd	2 722	2
3rd	2 738	16
4th	2 766	28
1972		
1st qtr	2 776	10
2nd	2 834	58
3rd	2 809	−25
4th	2 795	−14
1973		
1st qtr	2 934	139
2nd	3 248	314
3rd	3 323	75
4th	3 419	96
1974		
1st qtr	3 356	−63
2nd	3 409	53
3rd	3 315	−94
4th	3 239	−76
1975		
1st qtr	3 134	−105
2nd	3 039	−95
3rd	3 079	40
4th	3 139	60
1976		
1st qtr	3 146	7
2nd	3 079	−67
3rd	3 125	46
4th	3 152	27
1977		
1st qtr	3 269	117
2nd	3 273	4
3rd	3 214	−59
4th	3 181	−33
1978		
1st qtr	3 243	62
2nd	3 371	128
3rd	3 425	54
1978		
April	3 300	57
May	3 306	6
June	3 371	65
July	3 366	−5
August	3 413	47
September	3 425	12

Table 3 Relationship of retailers' stocks to retail sales

Index numbers – fourth quarter 1974 = 100 — Seasonally adjusted

	Stock levels at 1975 prices	Retail sales at 1971 prices	Ratio of stocks to sales
1966	77	83	93.6
1967	80	84	94.5
1968	84	87	95.9
1969	85	88	97.5
1970	85	90	94.8
1971	85	91	93.7
1972	86	96	89.9
1973	106	100	105.0
1974	100	99	100.7
1975	97	97	99.7
1976	97	97	100.3
1977	98	94	104.0
1975			
1st qtr	97	100	97.0
2nd	94	99	94.9
3rd	95	95	100.0
4th	97	95	102.1
1976			
1st qtr	97	96	100.7
2nd	95	97	97.6
3rd	96	98	98.7
4th	97	96	100.9
1977			
1st qtr	101	94	107.2
2nd	101	93	108.2
3rd	99	95	104.4
4th	98	95	103.2
1978			
1st qtr	100	97	103.4
2nd	104	98	105.8
3rd	106	101	104.7
1978			
April	102	97	104.8
May	102	99	103.4
June	104	99	105.1
July	104	101	102.4
August	105	102	103.4
September	106	100	106.0
October	106 p		

Notes for table 3

1 The index numbers of the level of stocks relate to the end of each time period; the index of sales refers to retail sales during the period.

2 The 1971 = 100 index of retail sales has been rebased on the fourth quarter of 1974 for the purpose of this table.

3 The index numbers of the stocks sales ratio are calculated from unrounded estimates of the data in the previous two columns.

p Provisional.

Notes

1 The book values are valued exclusive of VAT.

2 For the estimates at constant prices, it should be borne in mind that, when price increases are large, the various problems associated with revaluation of the value series to constant prices become more acute. Thus the relative accuracy with which constant price changes have been measured is likely to have been reduced in recent periods.

3 The statistics given in table 2 were introduced in an article in *Trade and Industry*, 28 March 1975, and those in table 3 were introduced in an article in the issue of 17 March 1978.

4 Long-run series back to 1970 for table 1 and to 1967 for table 2 were included in the article in *Trade and Industry*, 22 September 1978.

Insurance Companies Act 1974: authorisations and revocations

The following authorisations to carry on insurance business in Great Britain were issued by the Secretary of State for Trade under Section 3(1) of the Insurance Companies Act 1974 during the period 1 October to 31 October 1978.

Name of insurer and registered office or address in GB	Country of incorporation if outside GB	Date of authorisation	Class or classes of insurance business for which authorisation was issued
Consolidated Marine and General Insurance Company Ltd 6-9 Snow Hill, London EC1A 2AL	—	19.10.78	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17

Under the powers conferred on him by paragraph 2 of Schedule 4 of the Insurance Companies (Classes of General Business) Regulations 1977 the Secretary of State for Trade has accepted that the companies listed below were carrying on the classes of insurance business shown in the table immediately before 1 January 1978 and are accordingly authorised to carry on those classes of business. These classes of business are additional to the ones which the companies were automatically authorised to carry on as 'corresponding business' by virtue of paragraph 1 of Schedule 4 to the Regulations.

Name of insurer and registered office or address in GB	Country of incorporation if outside GB	Date of acceptance	Class or classes of insurance business for which authorisation was accepted
The London Steam-Ship Owners' Mutual Insurance Association Limited, 17 Crosswall, London EC3N 2AT	—	13.10.78	16, 17
The Shipowners' Mutual Insurance (Seamen's Benefits) Association Limited, 24 St Mary Axe, London EC3	—	11.10.78	1[1], 2, 16

[1] To the extent that the relevant risks are risks of the person insured sustaining injury, or dying, as the result of travelling as a passenger.

The following authorisations to carry on insurance business in Great Britain were revoked by the Secretary of State for Trade under Section 9 of the Insurance Companies Act 1974 during the period 1 October to 31 October 1978.

Name of insurer and registered office or address in GB	Country of incorporation if outside GB	Date of revocation	Class or classes of insurance business for which authorisation was revoked
American International Life Assurance Company of New York, 120 Fenchurch Avenue, London EC3M 5BP	USA	23.10.78	1, 2
Civil Service Motoring Association Ltd, 797 London Road, Thornton Heath, Surrey CR4 6YG	—	11.10.78	14, 15
East Kent Packers Mutal Insurance Association Ltd, Faversham, Kent ME13 8BQ	—	12.10.78	14, 15
Elgin Plate Glass Mutual Insurance Association 209 High Street, Elgin	—	13.10.78	7, 8, 9

Classes of business

OLT	Ordinary long term insurance business
IND	Industrial assurance business
1	Accident insurance business
2	Sickness insurance business
3	Land vehicle insurance business
4	Railway rolling stock insurance business
5	Aircraft insurance business
6	Ships insurance business
7	Goods in transit insurance business
8	Fire and natural forces insurance business
9	Damage to property insurance business
10	Motor vehicle liability insurance business
11	Aircraft liability insurance business
12	Liability for ships insurance business
13	General liability insurance business
14	Credit insurance business
15	Suretyship insurance business
16	Miscellaneous financial loss insurance business
17	Legal expenses insurance business

Registrations of British, community and foreign films

The following are details of films registered by the Department of Trade under the Films Acts 1960 to 1970, as amended by the European Communities Act 1972, during the week ended Friday, 10 November 1978.

BR/E indicates that the film is a British quota film, EC that the film is a quota film. The date which forms part of the registration number of each is the date on which quota life of the film expires.

Title of film	Registered no.	Playing time minutes	Date of registration	Registered in the name of	Maker's name
BRITISH					
Killer's Moon	BR/E 39801/12/11/83	92	8 November	Rothernorth Ltd	Rothernorth Ltd
Movietone News 2579	BR/E 39603/12/11/83	8	10 November	British Movietonews Ltd	British Movietonews Ltd
COMMUNITY					
Close Encounters Of A Handyman	EC 39799/12/11/83	76	8 November	Eagle Films Ltd	City-Film GmbH and Co Production KG, Berlin
FOREIGN					
Clayman	F 39797	4	7 November	Contemporary Films Ltd	Czechoslovak Filmexport, Prague
Jaws 2	F 39798	117	8 November	Cinema International Corporation (UK)	Universal Pictures, California
The Hills Have Eyes	F39800	90	8 November	New Realm Distributors Ltd	Vanguard Releasing Inc, California

Cinema admissions and takings in August

During August, counted as a four week period, the weekly average of admissions to cinemas in Great Britain was 3.32 million and the weekly average of gross box office takings was £2.84 million. The comparable figures for August 1977 were 2.71 million and £2.14 million.

Index to statistics published regularly in 'Trade and Industry'

(a) annually (m) monthly (q) quarterly Weekly statistics are not included

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Air transport trade by air (a) 25 Aug 78
Balance of payments current account (m) 20 Oct 78
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